NSW Long-Term Fiscal Pressures Report

2006-07

New South Wales

Budget Paper No. 6

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EXECUTIVE SUMMARY

This Budget Paper projects the long-term fiscal position of New South Wales over a 40 year horizon. The projections are made assuming that there are no changes to tax or other policy settings in that timeframe. This means tax rates are fixed, there are no changes to Commonwealth funding arrangements and revenues and expenditures[1] are determined solely by economic, demographic and other growth influences[2].

The purpose of the Paper is to explore the fiscal importance of long-term historic and demographic trends arising from the age composition of the population, lower fertility rates, rising life expectancies, and spending pressures in areas such as health and social security and welfare.

There has been considerable research undertaken both in Australia and globally on the impacts that an ageing population is expected to have on economies and on fiscal positions. Ageing will substantially increase demand for many services provided by the NSW Government, particularly health and community care. In addition, a smaller proportion of the total population in the traditional working age groups will mean fewer taxpayers relative to those who require taxpayer funded services. These pressures, especially on the expenditure side, will accelerate over the next ten years.

There are other areas of potential fiscal pressures not included in the modelling work. For example, major changes to national policy settings around climate change could have significant financial implications.

Whatever the final composition of the challenges ahead, the State must continue to have a sufficiently strong fiscal position – evident in its balance sheet – to respond to changing circumstances. A strong fiscal position enabled the Government to respond to unforeseen events, such as the collapse of HIH, the severe drought between 2002 and 2004, and the current cyclical slowing in revenues, without affecting essential services.

[1] *In this Budget Paper, 'expenditures' refers to the sum of recurrent expenses and capital spending. 'Expenses' refers to recurrent expenses only.*

[2] *Other growth influences are examined and defined in Chapter 4.*

It is for these reasons that the NSW Government introduced the *Fiscal Responsibility Act (FRA) 2005*, with the 2005-06 Budget. This Act is designed to further improve the State's balance sheet – with targets to further reduce general government net financial liabilities – thereby providing scope to deal with both longer term challenges such as ageing and retain the flexibility to respond to unforeseen needs. The Act requires the Government to report on the long-term effects of budget expenditure and revenue decisions in each year's Budget Papers – which is the first such requirement by any government in Australia.

In addition to the reporting in annual Budget Papers, the *Fiscal Responsibility Act 2005* requires that the Government publish every five years an assessment of the State's fiscal gap[3]. This Budget Paper is the first such assessment.

The projections in this Budget Paper are based on existing policy settings. In reality, the NSW Government is seeking to revise many of the underlying assumptions – foremost among these is the share of Commonwealth grants revenue that the State receives. The responsibility for service delivery lies largely with the States while the Commonwealth collects the bulk of taxation revenue. This is an unsustainable relationship due for review. New South Wales commissioned an independent review by Associate Professor Neil Warren of the University of New South Wales comparing and benchmarking Australian and international arrangements for the allocation of taxation powers and expenditure responsibilities between central and subnational governments, and mechanisms for fiscal transfers between governments.

Warren[4] found that, "Australia performs comparatively poorly in international comparisons of intergovernmental fiscal arrangements. A review in the national interest is overdue and essential if Australia is to adequately meet the challenges of an ageing population."

In February 2006, the Commonwealth and State Governments agreed to a National Reform Agenda to lift national productivity and workforce participation over the next decade. The Council of Australian Governments' reform agenda recognises that steps need to be taken to offset the likely economic and financial burden of an ageing population. It is proposed that improvements be made to human capital and national competition policy, and that the burden of business regulation be reduced.

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[3] *The fiscal gap is the difference between the base period primary balance and the primary balance at the end of the projection period. A positive gap implies that fiscal pressures will be building over the projection period.*

[4] *Warren, N, "Benchmarking Australia's Intergovernmental Fiscal Arrangements", Final Report, May 2006.*

Ultimately, what is needed is a range of solutions over a sustained period to manage the economic and fiscal pressures outlined in this Budget Paper. A menu of policy responses will need to be consistently applied and, as the analysis in the Paper makes clear, the earlier these are commenced the lower the adjustment costs. Many of the policy responses, perhaps the most important ones, will require a coordinated and hence cooperative approach from the Commonwealth and State Governments. Agreement to a National Reform Agenda is a promising start.

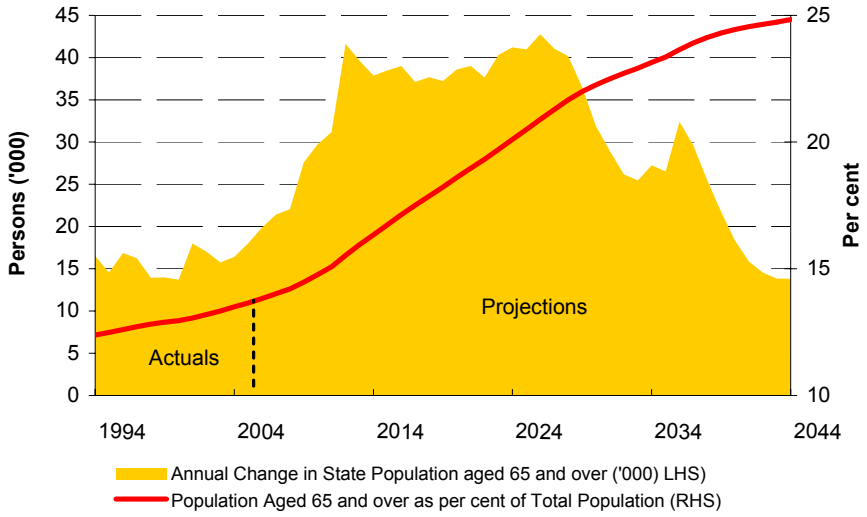
KEY FINDINGS

DEMOGRAPHIC AND ECONOMIC

By 2044[5], projections are that the population of New South Wales will grow to 8.6 million from 6.8 million at June 2005. However, the rate of population growth will progressively decline, from 1.0 per cent per year in the last decade to just 0.3 per cent a year in the decade to 2044. The slower population growth reflects lower birth rates and an unchanged net immigration level.

The proportion of the population aged below 15 years will fall from 19.5 per cent in 2005 to 15.5 per cent in 2044. The proportion of the population aged 65 years or more will almost double from 13.7 per cent in 2005 to 24.8 per cent in 2044, reflecting the long-term rise in life expectancy and the progression of the baby-boom generation.

Chart 1: NSW Population aged 65 and over



[5] *The projections are made on a fiscal year basis from 2004-05 to 2043-44. All references to years in the paper refer to fiscal years ending June of the date cited. For example 2044 refers to fiscal year 2043-44.*

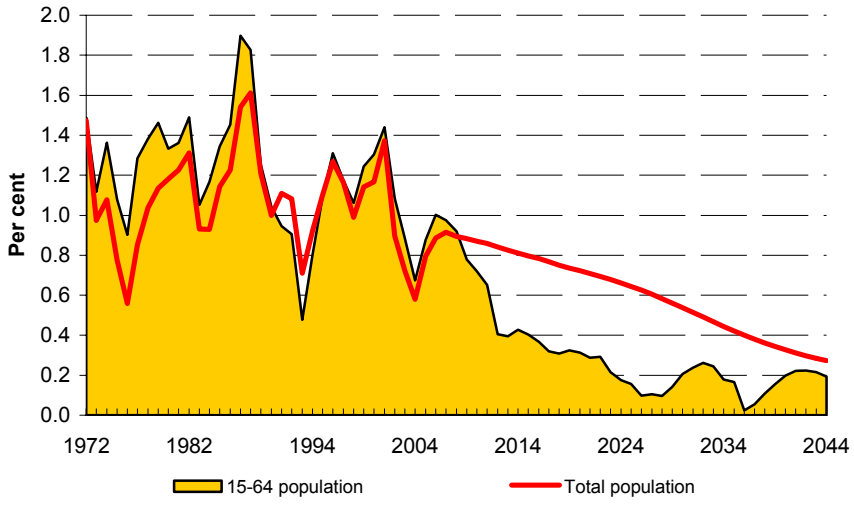
The number of NSW residents aged 65 or more will increase from less than 1 million in 2005 to over 2 million by 2044. Importantly, there will be an acceleration in the growth of this age group from now on. As shown in Chart 1, the annual increase in the population aged 65 and over will more than double from 19,000 in 2005 to 40,000 in six years' time. It will continue to increase at that elevated rate for the subsequent 20 years. The proportion of the total population aged 75 years or more will increase from 6.6 per cent in 2005 to 14 per cent by 2044.

The dependency ratio - the proportion of the population aged below 15 years or above 64 years - will rise from 33 per cent in 2005 to 40 per cent in 2044. The proportion of the population with the highest labour force participation (those between 15 and 64 years of age) will decline from 67 per cent to 60 per cent.

For the first time in at least the last 30 years, growth in this important part of the working age population will consistently be below that of total population, as shown in Chart 2. That phenomenon will start as early as 2010 on current projections.

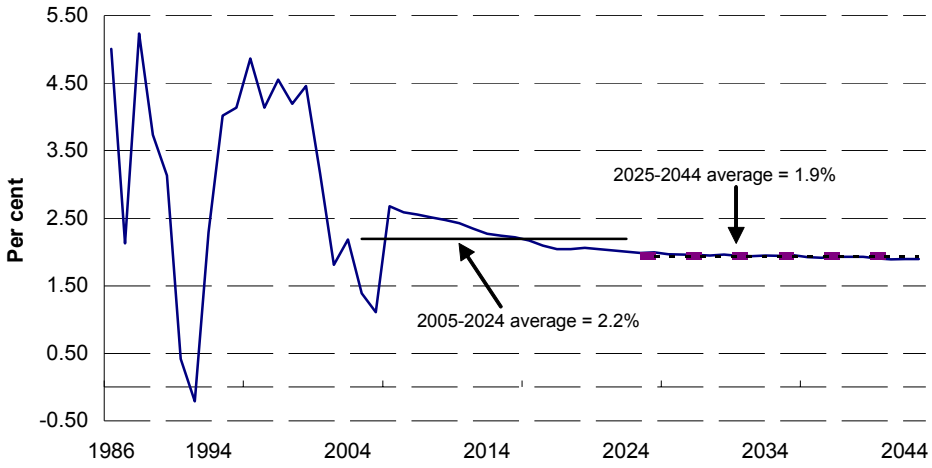
The projections assume no change to the current participation rates of older workers or workers with young children. Improvements to superannuation and retirement rules could lead to higher participation rates than assumed, as could improvements in the provision of family friendly working conditions and childcare. Changes in the composition of migrant intake could also improve the dependency ratio if a higher complement of skilled workers were to reside in New South Wales.

Chart 2: Annual Growth of 15 – 64 and Total Population



Slower growth in the population aged 15 to 64 compared with the total population and stronger growth in the population aged 65 and over will mean that on the basis of existing labour force participation rates by age cohort, the aggregate labour force participation rate will decline. In turn this will mean slower growth in the labour force and employment compared with total population growth. Slower employment growth will act to slow GSP growth. In the decade to 2044, GSP growth will slow to an average of 1.9 per cent per annum. The principal driver of GSP growth will be productivity growth, which is assumed to grow at 1 ¾ per cent per annum.

Chart 3: GSP Growth Projection – NSW (annual % change)



The implication of employment growing more slowly than the total population is that per capita GSP growth will slow. While living standards will increase substantially, they will do so at a slower rate compared with recent experience. Per capita GSP growth will slow from 2.1 per cent per annum in the 1990s to 1.6 per cent per annum in the decade to 2044. Despite the slower rate of growth, living standards will improve markedly, with GSP per capita projected to increase by almost 75 per cent from 2005 to 2044. By way of comparison, national GDP per capita increased by slightly more than 75 per cent over the 30 years to 2005.

FISCAL PROJECTIONS

The fiscal projections in this Budget Paper differ from the Budget forward estimates as the latter includes impacts of policies announced in the Budget as well as cyclical movements in revenues. The analysis in this Budget Paper focuses on what is referred to as the primary balance rather than on the budget balance. The fiscal gap is the change between the base period and the end period primary balance expressed as a per cent of GSP. The primary balance – the gap between spending and revenue excluding interest transactions but including net capital expenditure - is the preferred measure because it is unaffected by initial debt levels and interest rate assumptions. It permits analysis of fiscal pressures without the cumulative impact of deficits on debt and interest payments.

In practice, the budget balance is more relevant because it is an indicator of the sustainability of the fiscal position and interest costs are important considerations. This report, however, is concerned with examining future pressures that may impact on fiscal sustainability, rather than fiscal sustainability per se.

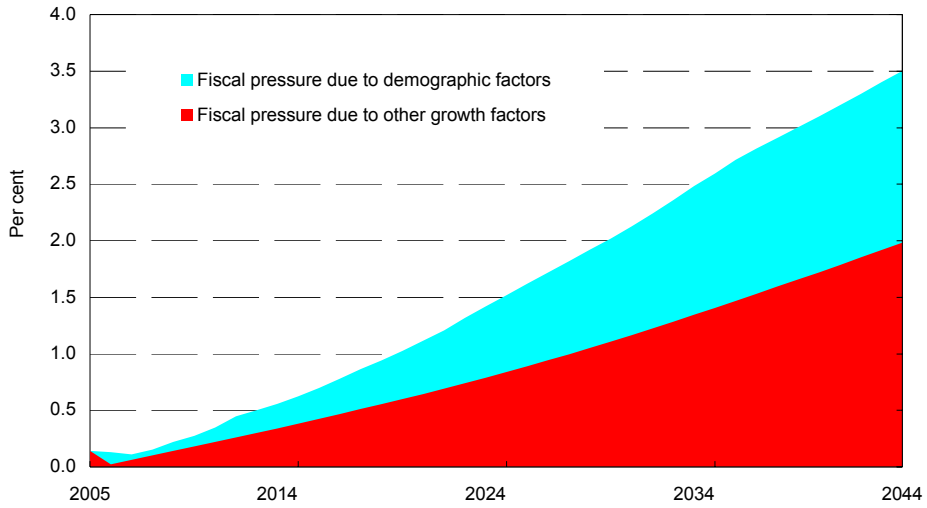
The fiscal projections in this Paper suggest that, with unchanged policies, cost and real growth pressures above those in the general economy (termed other growth factors in this Budget Paper) along with the ageing of the population will have a significant impact on the NSW general government sector's finances over the next 40 years.

- The modelling work based on the above assumptions projects a fiscal gap of 3.4 per cent of GSP[6] by 2044 or around $23 billion in today's dollars (almost double the current health budget). The fiscal gap is measured as the difference between the primary fiscal balance as a share of GSP in 2005 compared with the primary fiscal balance as a share of GSP in 2044. Chart 4 shows the total projected fiscal gap opening up slowly until 2015 but then starting to increase at a faster rate. The reason is that the fiscal impacts of demographic change start to accelerate beyond 2015, as also illustrated in Chart 4. Demographic factors account for around 40 per cent of the total gap by 2044[7], with other growth factors accounting for the remaining 60 per cent.

[6] *NSW GSP in 2043-44 is estimated to be around $680 billion in 2005-06 dollars, thus 1 per cent of NSW GSP will be $6.8 billion.*

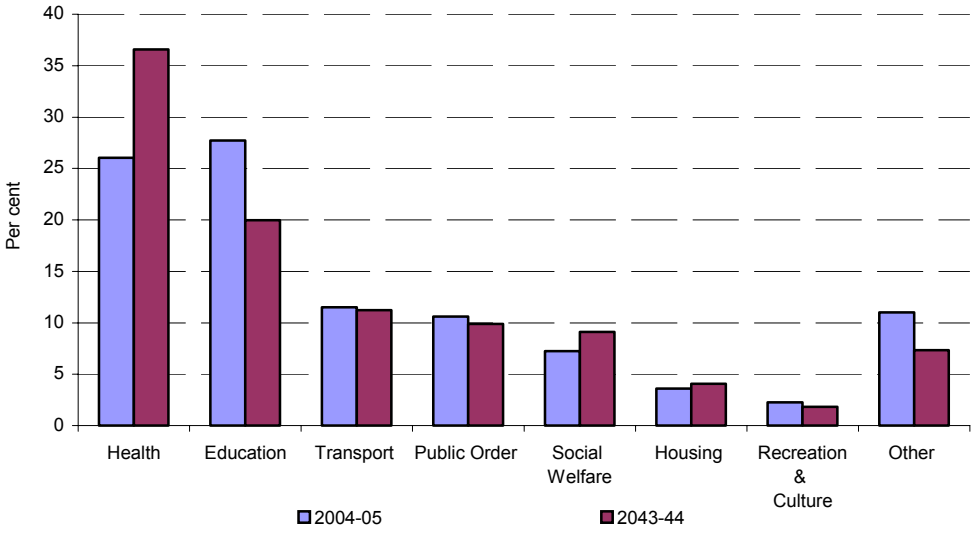
[7] *Ageing, specifically the compositional impact from ageing, accounts for around one third of the total gap with the growth of population size accounting for a further 6 per cent of the total gap.*

Chart 4: Fiscal Pressure Projection: Primary Balance as Percentage of GSP



- Expenses increase from 13 per cent of GSP in 2005 to 16 per cent of GSP in 2044. With total revenues only slightly lower as a share of GSP, almost the entire fiscal gap is due to higher expenses growth. Growth in health expenses is projected to contribute over 75 per cent of the total gap. As Chart 5 shows, over the 40 year period, the share of health expenses in total government expenses rises dramatically, while the share of education expenses declines. This reflects the change in the proportions of the population in the age cohorts that account for most of the expenditure in these sectors.

Chart 5: Functional Shares of Total Expenses



- In Health, the ageing of the population is the primary cause for the projected increase in its share of total general government expenses. As a current example of such trends, the rate of growth in angioplasty procedures for people over 70 years is almost twice the rate of growth for people in the 20 to 49 age group. However, there are also other growth factors at play. This is consistent with recent trends where new technologies and procedures result in a net increase in the volume of services and costs rather than being a substitute for older technology. For example, the use of coronary angioplasties, often using expensive stents, has more than doubled since 1995-96 but there has been little reduction in the number of coronary bypass grafts undertaken over the same period.

- The share of Social Security and Welfare expenses in total expenses is also projected to increase.

    - Expenditure on Social Security and Welfare services has increased significantly over the past decade, largely as a result of an increased volume of services provided. For example, in the area of child protection, reports of children at risk of harm or neglect have increased significantly over recent years from 33,018 in 1995-96 to 159,643 in 2001-02, a 380 per cent increase. In response, the Government increased the resources of the Department of Community Services by $1.2 billion over the five years to 2006-07. Reports have continued to increase but at a lower rate, with 216,343 reports in 2004-05, an increase of 35 per cent since 2001-02. It is anticipated that with new initiatives focused on breaking the cycle of abuse by early intervention, specialist policing and victim oriented courts, there will be some moderation in the growth and level of child protection reports over time.

    - Total spending for the Department of Disability, Ageing and Home Care (DADHC) has increased from $1.1 billion in 2001-02 to an estimated $1.6 billion in 2005-06, an increase of 38.9 percent in four years. More clients have entered state care and the cost and quality of that care has been the largest contributor to total expenses growth. For example, the number of people in group homes increased by 14 per cent between 2000-01 and 2005-06 and the cost per person rose by 40 per cent over the same period. The unit cost in the post-school program has increased by 21 per cent since 2001-02.

- Expenditure by DADHC was also impacted by the Commonwealth-State, Territory Disability Agreement. Historically, State funding under this agreement has far exceeded that of the Commonwealth (NSW contributions represent over 80 per cent of total funding over the four years to 2005-06), while the demand for disability services has grown significantly. NSW government funding has increased from $637.9 million in 2001-02 to $1,128 million in 2005-06, an increase of 77 per cent. In contrast, Commonwealth grants under this agreement have increased from $166.1 million in 2001-02 to $194.2 million in 2005-06 or by 17 per cent.

♦ The share of Transport & Communication expenses in total expenses is projected to decline slightly, though expenses are expected to increase by 0.3 percentage points as a share of GSP.

- Substantial transport concessions have been extended to all seniors across the State. The increasing number of people becoming eligible for these concessions will impact on the total cost of this service.

- Due largely to a significant increase in funding to deliver improved services, the Government's general subsidy for CityRail trips has increased from $2.39 per trip in 2002-03 to $4.21 per customer in 2006-07 - an increase of over 76 per cent over a five year period.

♦ Total revenues are projected to decline by 0.3 percentage points as a share of GSP over the 40 year horizon.

- Own-source tax revenue is expected to decline by 0.2 percentage points as a share of GSP, reflecting a reduction in the State's tax base as a share of the economy. Other own-source revenues are projected to increase (by 0.3 percentage points as a share of GSP), mainly driven by an increase in government sales of goods and services which is assumed to move in proportion to total government expenditure.

- Commonwealth general purpose grants funded from the GST are projected to decline by 0.3 per cent as a share of GSP, reflecting the rising share of items not subject to GST in consumer spending. The rise in private spending on health services is the main contributor to this result.

- Total Specific Purpose Payments (SPPs) distributed to all State and Territory Governments are broadly maintained at the same share of GDP over the projection period – given the funding assumptions made. However, New South Wales' portion of SPPs is projected to decrease slightly due to slower population growth in New South Wales compared with other jurisdictions. The funding assumptions may be optimistic given past tendencies for SPPs to grow more slowly than GDP.

IMPLICATIONS OF RESULTS

The fiscal projections are made on a no policy change basis. Clearly policy changes will be made over the next 40 years, which will mean that the projected fiscal gap will not eventuate. But what policies are available and when would such policies need to be implemented?

While tax increases are a hypothetical solution, that strategy would run contrary to the trend of at least the last decade, where revenues as a share of GSP have been stable or declining. More fundamentally, the current tax bases available to the State would not be capable of supporting the extent of revenue growth required to close the fiscal gap.

Assuming that preferences are for the size of NSW government (based on revenues) to remain broadly at its current position, what are the other options to address the fiscal pressures that are likely to mount over the next 40 years? The following scenarios have been modelled to provide more information on the impact of possible policy responses.

The Commonwealth's approach to Specific Purpose Payments (SPPs) and other fiscal transfers over the period is one of the most important factors impacting on the State's fiscal pressures given the substantial proportion of these transfers in the State's revenues. To the extent higher spending pressures are not reflected in higher SPPs, there will be more fiscal pressure on the State and less on the Commonwealth. For example, if Commonwealth funding were to be based solely on increases in the CPI and population, the NSW fiscal gap would rise from 3.4 per cent to 4.3 per cent of GSP by 2044. Ageing of the population will increase demands in key service delivery areas such as health, disabilities, home and community care, transport and housing - areas where there is joint funding between the Commonwealth and the States.

These demands serve to highlight that the need for improved dialogue between the tiers of government is urgent. An integrated and collaborative approach to policy development would minimise fiscal risks and greatly assist sustainable, effective service delivery.

While in the near-term there are clear issues regarding the distribution of GST revenues, in the longer-term GST revenues will decline as a share of GSP. The decline in the GST tax-base over time is because the components of private consumption that are not subject to GST, in particular spending on health, will grow faster than the taxable components. This issue will also need to be addressed by the Commonwealth and States.

Increases in workforce participation of people aged 65 or more would provide some assistance in lowering the fiscal gap. The Federal Government has commenced initiatives to encourage participation in the workforce beyond current norms. An immediate one percentage point increase in participation for the 65+ age group would lower the fiscal gap by 0.05 percentage points of GSP. With the participation rate for this group currently at only 6.8 per cent, there is some scope for lowering the State's potential fiscal gap via this mechanism.

A lift in productivity growth for the State, via ongoing micro-economic reform, would raise GSP and household income growth. Higher household income growth would in turn drive higher demand for core state government services meaning there would be little impact on the fiscal gap. Higher productivity growth would only be beneficial for the sustainability of state finances, as distinct from the economy generally, if the relationship between economic growth and state expenditure growth was altered such that any additional government expenditure growth was less than the additional GSP growth. Community expectations of the way services are delivered and the types of services funded by government are important influences on future expenditure growth.

Higher than economy-wide productivity growth within the NSW general government sector would have a significant impact on the fiscal gap. For example an immediate and sustained 0.8 per cent annual lift in general government productivity – over and above that of economy-wide productivity growth – would eliminate the fiscal gap by 2044. Cumulative efficiency gains in service delivery starting now have a large impact over a 40-year span. The later that such efficiencies are achieved, the larger the annual task that remains. For example if productivity improvements were delayed by a decade, the annual improvement required to close the fiscal gap would grow to 1.1 per cent – above that of economy-wide productivity.

As to the timing of such policies, the results suggest that some decisions will need to be made in the next decade. Fortunately, the most direct reduction in the fiscal gap can be made with policy changes that raise productivity in the NSW general government sector. The efficiency dividend introduced from 2005-06 and extended to 2008-09 in this Budget will have ongoing impacts on the fiscal gap.

The Government's *Fiscal Responsibility Act 2005* targets, and this Budget delivers, a continual reduction in general government net financial liabilities until 2015, the time when the fiscal gap starts to widen more acutely. The Act was framed with that timing in mind. The next issue of this Budget Paper, in 5 years time, will contain updated estimates of the fiscal gap and the *Fiscal Responsibility Act* will be revised to contain updated fiscal targets. In the meantime, Chapter 1 of Budget Paper No.2 will report each year the impact of Budget initiatives on the fiscal gap. The first such report is contained in this year's Budget Paper No. 2.

CHAPTER 1: FISCAL SUSTAINABILITY

1.1 FISCAL SUSTAINABILITY

Fiscal sustainability in the government sector is generally understood to mean the ability of governments to continue providing current standards of services to the community over the long term without increasing tax rates. In the long run if the growth in government expenses exceeds long-term trend revenue growth, the capacity to continue providing services will be constrained by, and reflected in, a deterioration in the State's balance sheet.

Fiscal sustainability ensures the continuity of key services, notwithstanding temporary shocks to the State's financial position (such as cyclical slowing in the housing market), which reduce revenues temporarily. A sustainable balance sheet should absorb shocks without the need for a substantial impact on service delivery. A sustainable fiscal position also allows time for policies to be put in place to respond to permanent shocks, such as the slowing in revenue growth from the Commonwealth, as has happened in recent years. If the State's balance sheet had not been as strong, faster and more painful adjustments to that reduced Commonwealth funding may have been required.

Fiscal sustainability also places the Government in a better position to respond to unforeseen circumstances, such as natural disasters or terrorism concerns. It also permits the Government time to establish whether a fiscal deterioration is permanent or temporary.

Business confidence, business investment and future growth in the economy are also enhanced when a State's fiscal position is sustainable and fiscal policy settings are consistently maintained over time.

The NSW Government's fiscal strategy over the past decade has been to strengthen the State's finances to ensure fiscal sustainability. The strategy has both a cyclical dimension, and a longer-term dimension. Over the short to medium-term horizon, the strategy seeks to ensure that state finances are resilient to swings in the business and property cycles. This is because cycles in the property market and the economy in general can cause state revenue growth to fluctuate quite markedly, with periods of above and below trend growth. Demand for government services, however, tends to be driven by demographic factors, longer term economic developments and service expectations. This demand does not fluctuate significantly through property and business cycles.

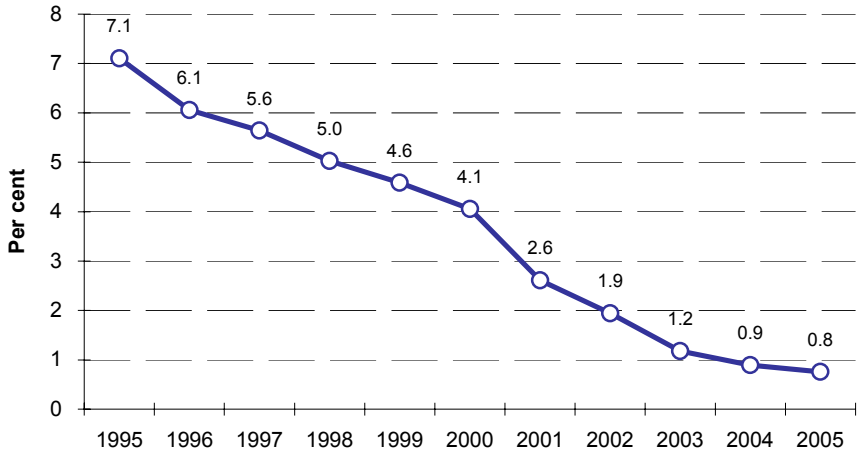
Having achieved a sustainable fiscal position, the key to maintaining it in the short to medium term is to align expenses growth with the long term trend growth in revenue. This requires a strong balance sheet, where net debt and net financial liabilities are low enough to absorb the impact of a cyclical decline in revenues. If expenses growth accelerates during periods of above trend growth in revenue, the additional rate of growth in expenses can prove difficult to reverse when revenue growth inevitably returns to trend.

Over the longer term, the challenge for fiscal strategy is to anticipate and manage structural changes and persistent pressures on public spending and revenue. Possible sources of fiscal pressure are: an ageing population; technology-related cost pressures in health expenditure; rising community expectations of the standard and quantity of public services to be provided; and relatively high service delivery unit costs caused by lower than average productivity growth.

1.2 FISCAL STRATEGY: RECENT HISTORY

In the early to mid 1990s general government debt had grown to levels that threatened the maintenance of the State's AAA credit rating, and placed in jeopardy the Government's ability to maintain growth in service delivery. Underlying net debt in the general government sector has, however, declined from 7 per cent of GSP in 1995 to less than 1 per cent by June 2005, as a result of the fiscal strategy implemented over the past decade.

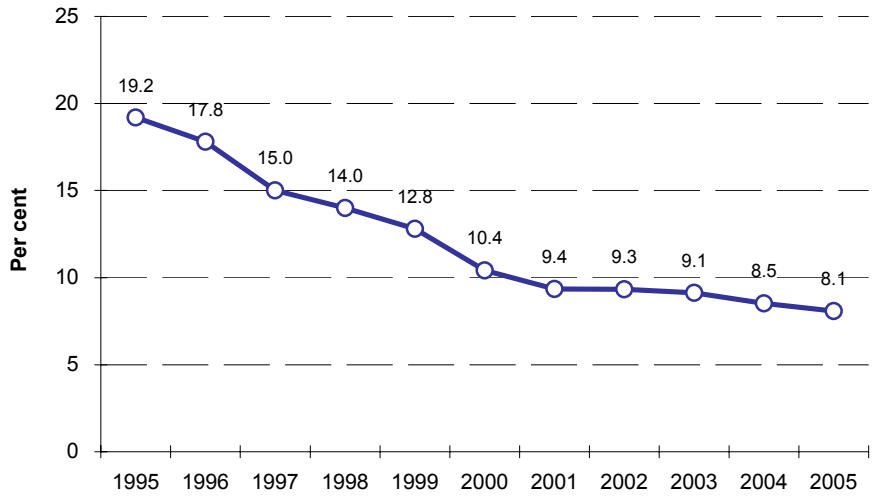
Chart 1.1: Underlying Net Debt of the General Government Sector at 30 June 1995 to 2005 (share of GSP)



The Government's fiscal strategy, underpinned by the requirements of the *General Government Debt Elimination Act 1995*, delivered nine consecutive cash surpluses to 2004-05. The proceeds of those budget surpluses, and the requirement for public trading enterprises to operate on a commercial basis, were used to lower the level of general government net financial liabilities from 19.2 per cent of GSP ($32.8 billion) in June 1995 to 8.1 per cent of GSP ($24.7 billion) in June 2005.

The Government's target of reducing general government net debt to a sustainable level by June 2005 has been achieved. The long-term targets of the *Fiscal Responsibility Act 2005*, to reduce general government net financial liabilities to 6 per cent of GSP by 2015, and eliminating total State sector unfunded superannuation liabilities by 2030, remain on track.

Chart 1.2: Net Financial Liabilities of the General Government Sector at 30 June 1995 to 2005 (share of GSP).



The NSW Budget position has, however, weakened recently as a result of a number of cyclical and structural factors: below-trend revenue growth; decisions by the NSW Industrial Relations Commission to award wage increases above the Government's wages policy; and Commonwealth grant funding shortfalls.

The effects of these changes on the general government operating position will be absorbed by the balance sheet in the short term.

1.3 FISCAL STRATEGY: THE FUTURE

There are a number of fiscal pressures that have emerged or increased in significance in recent years. Without any change, these will place the State's finances under pressure, and are described in detail in Chapter 4.

To ensure that the Government's fiscal strategy framework remained relevant to the fiscal challenges New South Wales faces in the future, the Government introduced legislation in 2005 – The *Fiscal Responsibility Act (FRA) 2005* – which builds upon the fiscal targets and principles in *The General Government Debt Elimination Act (GGDEA) 1995*. The Act sets targets to further reduce the level of net financial liabilities over the coming decade. The fiscal targets and principles are outlined in the box below.

A distinction between the two Acts is the requirement in the *FRA* that the Budget must take into account the anticipated future fiscal gap associated with ageing and other long term trends. An assessment of the fiscal gap is required in the 2006-07 Budget Papers, and in conjunction with every five-yearly review of the Act. An assessment of the impact of budget measures in respect of expenses and revenue on the long-term fiscal gap is also to be presented in the annual Budget Papers.

For the first time in Australia, policy will be measured by its medium and long term impact, rather than solely in the Budget year and the subsequent three year forward estimate period. This is a significant step forward in tackling the future issues that New South Wales faces.

Box 1: Main Features of the *Fiscal Responsibility Act 2005*

Purpose

- The *FRA* continues the directions of the *General Government Debt Elimination Act 1995*. It contains both medium-term and long-term fiscal targets aimed at controlling the level of general government liabilities, and a range of fiscal principles to address specific goals such as constraining the growth in expenses, and ensuring ongoing prudent risk management.

Main Features

- Retention of general government net debt as a fiscal target.
- A net financial liabilities target, to provide a focus on the full range of the general government sector's future financial obligations, including debt, unfunded superannuation liabilities, insurance liabilities, and other liabilities (such as accrued employee entitlements).
- The focus on the budget result has been retained, with Fiscal Principle No. 1 referring to the need to keep the Budget in surplus.
- The need to constrain the growth in net cost of services and expenses is emphasised, with Fiscal Principle No. 2. This seeks to ensure expenses growth is at or below the long-run average growth in revenue rather than the growth in gross state product. This reflects the point that in the long run a government's capacity to spend on a sustainable basis is limited by the revenue it receives.
- The significance of public sector pay outcomes to the overall growth in government expenses is recognised with the inclusion of Fiscal Principle No. 3 (managing public sector employee costs). This principle requires that government policy concerning rates of pay and employment conditions of general government sector employees is to be consistent with the fiscal targets and principles.
- Fiscal Principle No. 4 states that capital expenditure proposals are to be evaluated in accordance with government procurement policy requirements.
- Given the significant fiscal pressures New South Wales is likely to face in coming years, the *FRA* includes a fiscal principle that commits the Government to estimating the size of the long-term fiscal gap every five years – commencing in the 2006-07 Budget Papers – and assessing the impact of budget measures on the long-term fiscal gap in each year's Budget Papers.
- In presenting and implementing the Budget, deviation from the fiscal principles is allowed, provided it is only temporary. The Budget must explain the reasons for such a departure and the approach and timing of a return to the fiscal principles.

CHAPTER 2: DEMOGRAPHIC AND ECONOMIC PROSPECTS

2.1 INTRODUCTION

The ageing of the population has received significant attention in recent years. The dimensions of its impact are relatively clear and predictable. Without changes, including increased funding from the Commonwealth, the impact will pose a risk to the State's finances. This section examines the likely demographic outcomes and resultant economic performance for New South Wales over the next 40 years.

The analysis draws on the substantial work on these issues by the Productivity Commission, Commonwealth Treasury, and other state governments in recent years.

In the long-term, GSP growth will be determined by three key parameters: population, participation and productivity. The relationships are illustrated in the box below.

Box 2: The Key Parameters that Drive GSP Growth

The Three P's.

- **Population** growth and the age composition determines Population aged 15 and over
- **Participation** of Population aged 15 and over determines labour force (employed + unemployed)
- **Productivity** growth and employment growth determine GSP growth

In this Chapter, historical trends, assumptions and projections for these key variables are detailed.

The principal policy instruments affecting population growth (such as migration policy and family incentives) and participation rates (such as child care and retirement incomes policy) are controlled by the Commonwealth Government. The States also influence labour force participation through their own policies, including public sector workforce policies, education and technical training and public health policies.

Improving productivity within the general government sector is an area of State responsibility, while improving economy-wide productivity is a joint Commonwealth and State responsibility, with the Commonwealth having a greater degree of influence.

2.2 DEMOGRAPHIC TRENDS AND OUTLOOK

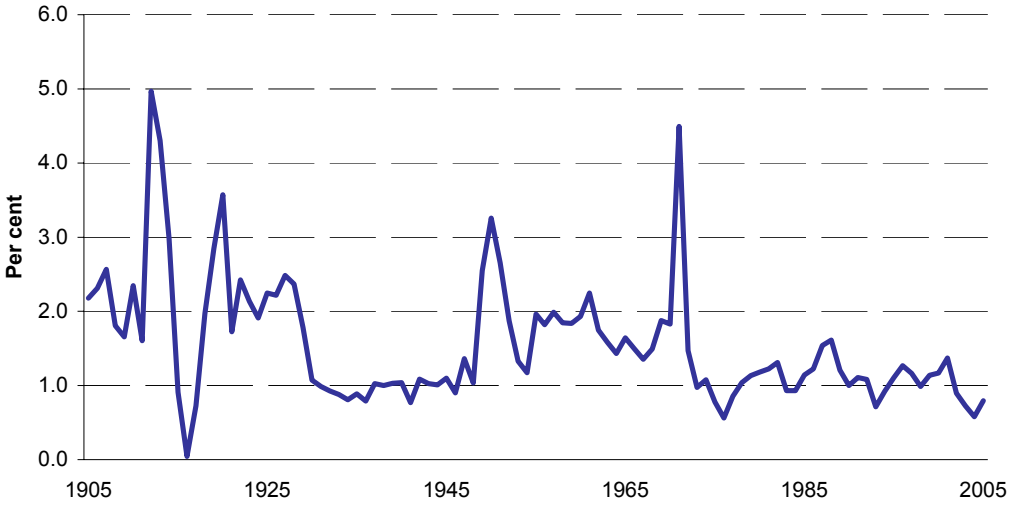
For the analysis reported here, the demographic transition's impact on the New South Wales economy and finances was investigated using a long term fiscal model developed by Access Economics and further refined by NSW Treasury.

> The estimates presented here are projections, not forecasts. *They rely on a range of assumptions, which may or may not be realised.* In particular, the projections depict outcomes that might be expected in the absence of any policy response. One of the purposes of the Paper is to examine policies that not only respond to, but anticipate, the challenges ahead.

HISTORICAL DEMOGRAPHIC TRENDS

Population growth in New South Wales and Australia has been very similar over the long term. In the early 1900s, NSW population growth regularly exceeded 2 per cent a year. NSW population growth dropped to less than 1 per cent during the depression years of the 1930s, but shortly after World War II increased to above 2 per cent. From around 1960, the pace of population growth has declined, remaining below 2 per cent since 1969. In 2005 the NSW population grew by around 0.8 per cent.

Chart 2.1: Population Growth – NSW Annual % Change



There are two broad factors that determine population growth. The first is natural population growth, measured as the excess of births over deaths. The second is migration, either from overseas or from other States.

Natural population growth

Natural population growth has been declining in New South Wales and Australia for some time. In the early 20th century natural population growth regularly reached 2 per cent a year, but has been below 1 per cent since 1972 and was 0.9 per cent in 2005. The slower natural population growth rate reflects a fall in the fertility rate (the total number of babies per woman) outweighing the rise in life expectancy.

Early in the 20th century, life expectancy at birth was 55 years for males and 59 years for females. By 2003, life expectancy had increased to 78 years for males and 83 years for females. The effect of rising life expectancy on natural population growth was more than offset by a fall in the fertility rate, which peaked at 3.4 in 1961 but fell to just below 1.8 in New South Wales in 2004.

Migration

Net migration (overseas plus interstate) has generally contributed to population growth in New South Wales, with the major exceptions being during both World Wars and in the early years of the Great Depression of the 1930s. Since WWII, net migration has contributed to NSW population growth in all but four years - 1953, 1975, 1993 and 2004. Over the past 20 years, net migration has contributed an average of 22,000 people per annum to the growth in the population of New South Wales. The net migration contribution has ranged from a loss of 5,000 persons in 1993 to a gain of more than 48,000 persons in 1988.

During the last 20 years, New South Wales has gained population from overseas migration while losing population from interstate migration. The gain from overseas migration has averaged 41,000 persons a year while the loss from interstate migration averaged around 19,000 persons. Both forms of migration have varied greatly from year to year. The gain from overseas migration ranged from a low of around 13,000 in 1993 to a high of around 63,000 in 1989. The loss from interstate migration has ranged from a low of 9,500 in 1987 to a high of 38,000 in 1989. In the five years to 2005, the loss from interstate migration averaged around 26,000 with an average gain of around 42,000 from net overseas migration.

A more recent phenomenon (see page 6-4 of 2005-06 Budget Paper No. 2) is that interstate migration has become increasingly influenced by the housing cycle. As house prices in Sydney rose sharply, both in the late 1980s and in the early 2000s, migration from New South Wales rose – but as house prices retreated, so too did the high levels of interstate migration.

Population projection assumptions

The rate of population growth depends on the fertility rate, life expectancy, and the level of overseas and interstate migration. The following assumptions underpin the latest ABS mid-point population projections, which are used in this Budget Paper.

The **total fertility rate -** the average number of babies each woman has in her lifetime – is assumed to fall from 1.79 in 2004 to 1.76 in 2018 and remain at this level to 2044. In comparison, assumed fertility rates used by other developed countries in population projections include: Canada (1.47), France (1.85), Germany (1.41), Italy (1.41), New Zealand (1.90), UK (1.70) and USA (1.98).

Life expectancy at birth is assumed to continue to rise but at a slower rate than previously. In 2003 life expectancy at birth in New South Wales was 77.7 years for males and 82.9 years for females. NSW life expectancy at birth is assumed to continue to improve to 84.7 years for males and 87.9 years for females by 2051.

The projection for **migration** assumes that New South Wales will have a net gain of around 39,000 persons a year from overseas migration but will lose 18,000 people a year to interstate migration. This compares with the 20 years to 2005, when New South Wales gained an average of 41,000 people a year from overseas migration and lost an average of around 19,000 a year to interstate migration.

The ABS also publishes detailed population estimates for two alternative projections: a low growth scenario and a high growth scenario.

Table 2.1 summarises the assumptions underlying each projection and compares the resulting population with the actual NSW population in June 1961 and 2005. An important observation is that relative to 1961, the total dependency ratio is only a little higher in 2044. Importantly, the composition of the dependency ratio changes dramatically, with the contribution from those aged under 15 halving, while the contribution from those aged 65 and over triples.

Table 2.1: Alternative NSW Population Projections to 2044

	1961	*2005*	*2044*		
			Low growth	*Med growth*	*High growth*
Assumptions:					
Fertility[(a)]			1.6	1.8	2.0
Overseas migration			28,480	39,160	49,840
Interstate migration			- 11,000	- 18,000	- 25,000
Life expectancy[(b)]			medium	medium	high
Total population[(c)]	3,917	6,774	7,989	8,601	9,622
Under 15	1,140	1,320	1,097	1,332	1,590
65 and over	343	926	2,140	2,136	2,462
75 and over	113	446	1,214	1,204	1,487
Proportion					
Under 15	29.1	19.5	13.8	15.5	16.5
65 and over	8.8	13.7	26.8	24.8	25.6
75 and over	2.9	6.6	15.2	14.0	15.5
Total dependency ratio[(d)]	37.9	33.1	40.5	40.3	42.1

(a) The average number of babies each female has in a lifetime

(b) Medium life expectancy means life expectancy at birth increases at a declining rate. High means life expectancy at birth increases at a constant rate.

(c) In thousands

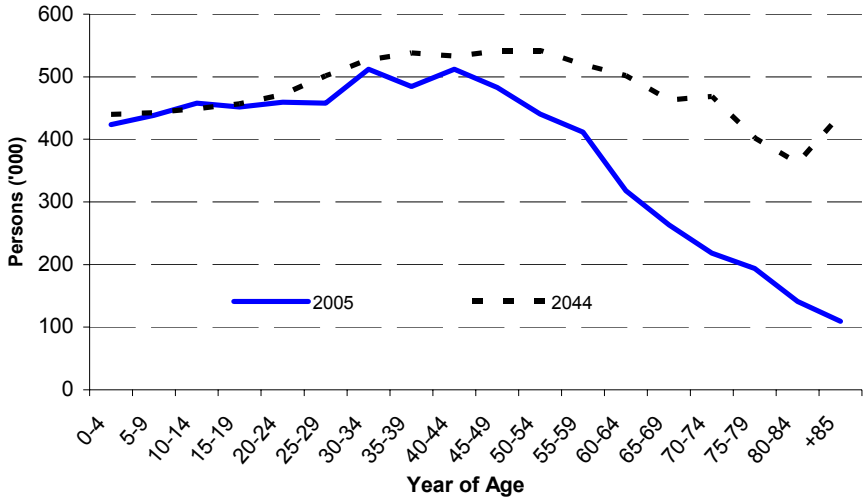
(d) The proportion of the population under 15 or over 64

Population projections to 2044

By 2044 the population of New South Wales is projected by the ABS to grow to 8.6 million compared with 6.8 million at June 2005[8]. While the population is expected to continue growing until 2044, the rate of growth is projected to decline from 0.8 per cent per year between 2005-2014, to just 0.3 per cent a year in the decade to 2044. The decline in population growth reflects both lower birth rates and an assumed unchanged immigration level.

Chart 2.2 compares the structure of the NSW population in 2005 and 2044 for the medium growth scenario which is utilised in this Budget Paper. It shows a considerably more even spread across age groups in 2044 compared with 2005, highlighting significantly more numbers in the over 45 age groups in 2044.

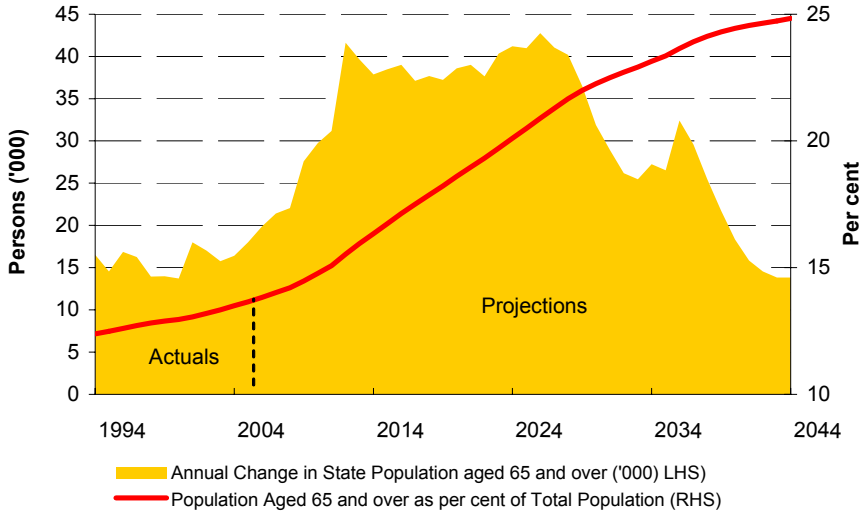
Chart 2.2: Population structure, actual and projected – NSW (persons)



[8] *ABS Cat No.3222.0, Population Projections 2004 to 2101. ABS population projections have been utilised because a consistent set of population projections across all states and territories is required in the modelling work. Department of Planning population projections are the official population projections used by the NSW Government for planning purposes. The difference between the Planning and ABS projections for New South Wales is, however, relatively minor and does not have a significant impact on the economic or fiscal results reported in this Paper.*

The proportion of the population aged below 15 years, the youth dependency ratio, will fall from 19.5 per cent in 2005 to 15.5 per cent in 2044, though the numbers will be virtually the same at 1.3 million. Conversely, the proportion of the population aged 65 years or more, the aged dependency ratio, will rise from 13.7 per cent in 2005 to 24.8 per cent in 2044, reflecting the long-term rise in life expectancy and the carry-through of the baby-boom generation. The number of NSW residents aged 65 or more will more than double from less than 1 million currently to over 2 million by 2044. Chart 2.3 shows that the annual increase in the population aged 65 and over will accelerate soon after 2010. As a consequence, the proportion of those aged 65 and over in the total population will start to rise more rapidly within a few years. The proportion of the population aged 75 years or more will rise from 6.6 per cent to 14 per cent, with the number rising from 0.4 million to 1.2 million.

Chart 2.3: NSW Population aged 65 and over



The dependency ratio - the proportion of the population aged below 15 years or above 64 years - will rise from 33 per cent in 2005 to 40 per cent in 2044. The seven percentage point rise in the aggregate dependency ratio reflects a four percentage point decline in the youth dependency ratio being more than offset by an 11 percentage point increase in the aged dependency ratio. The proportion of the population in what is traditionally considered the working age - between 15 and 64 years of age - will decline from 67 per cent to 60 per cent.

2.3 ECONOMIC TRENDS AND OUTLOOK

ECONOMIC TRENDS

GDP growth in Australia[9] averaged 3.6 per cent per year in real terms between 1960 and 2005. The pattern of GDP growth in Australia, however, has varied significantly over time. GDP growth averaged 5.0 per cent between 1960 and 1970, but 3.0 per cent between 1971 and 1980. GDP growth averaged 3.4 per cent from 1981 to 1990. Between 1991 and 1992, GDP fell. GDP growth averaged 3.8 per cent in the period 1992 to 2000.

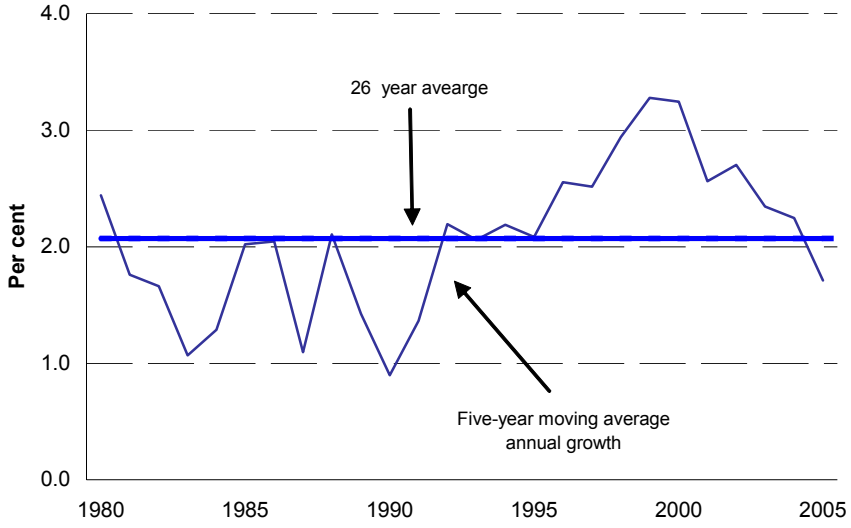
While economic growth was faster during the 1960s than during the 1990s, so was population growth. From 1959 to 1970 Australia's population growth averaged 2.0 per cent per year. In contrast, population growth averaged just 1.1 per cent per year between 1992 and 2000. As a result, the growth in GDP per capita was 2.8 per cent per year in both periods.

Productivity growth and assumptions

ABS data on national productivity is only available from June 1976. The most reliable data available is GDP per hour worked in the market sector. On that basis, productivity has grown by around 2 per cent per annum over the past 26 years. However, as seen in Chart 2.4 below, productivity growth was below the long-term average throughout the 1980's, while considerably above average from the mid-1990s.

[9] *ABS State GSP data only commences in 1990 and is still considered to be 'experimental' by the ABS. Over the long term, NSW GSP growth trends and national trends have been broadly consistent.*

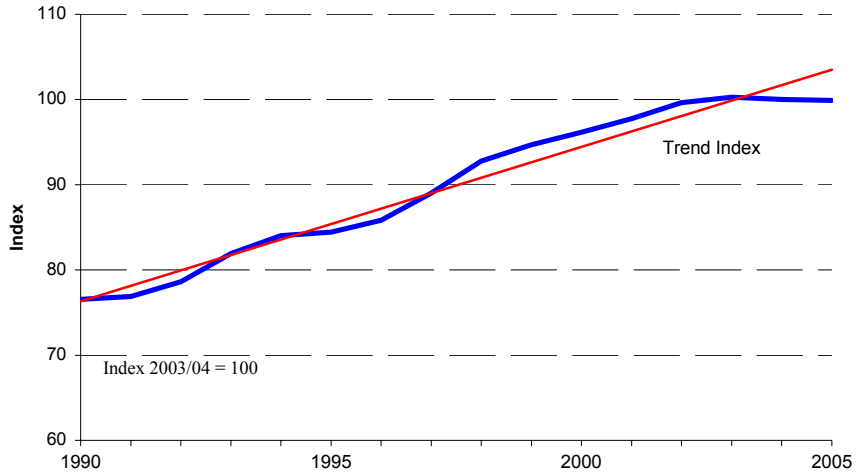
Chart 2.4: National Labour Productivity Growth: GDP per Hour Worked in the Market Sector



The acceleration in productivity growth in the most recent decade can largely be attributed to microeconomic reform that commenced in the 1980s and continued into the 1990s. In particular, tariff reductions and other reforms saw labour and capital move from low to higher productivity activities. While the benefits of the microeconomic reform process materialise many years later, there is some uncertainty about whether the rapid productivity growth of the last decade can continue for the next 40 years. This uncertainty has been heightened by a slowing in productivity growth in recent years.

Similar productivity data is not available for New South Wales. An alternative productivity measure can be calculated for New South Wales by assuming that part-time employees work a constant proportion of the time worked by full-time employees. This is shown in Chart 2.5. The trend line in Chart 2.5 shows average growth of 2.4 per cent a year in output per full-time employee in New South Wales since 1990.

Chart 2.5: NSW Productivity – GSP per FTE employee



Various other Australian studies of long-term fiscal pressures have assumed productivity growth of 1.75 per cent per annum. The same assumption has been adopted in the modelling work in this Paper for New South Wales. While longer-run trends may suggest that such an assumption is conservative, recent productivity growth has been considerably lower than the long-run trend. In any event, the assumption about productivity used in the modelling work, as discussed in Chapter 4, does not have a large bearing on the size of the fiscal gap. Productivity growth will, however, have an impact on living standards, including GSP per capita growth rates.

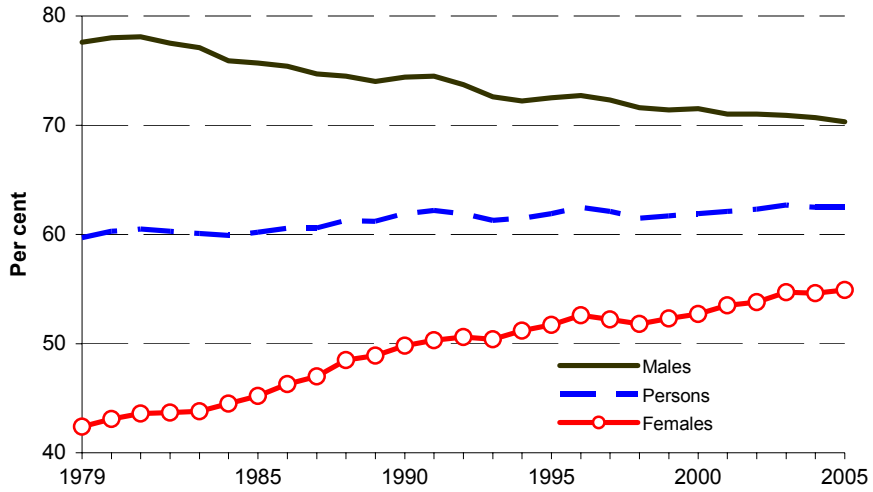
Labour Supply and Assumptions

Output growth is ultimately limited by improvements in labour productivity and the rate of expansion of the labour force. In turn, the size of the labour force depends on the growth of the population aged 15 and over and their willingness to work – the participation rate.

Between 1979 and 2005 the labour force in New South Wales rose by 50 per cent, or an average of 1.6 per cent a year. Over that time period, the participation rate rose from 60 per cent to 63 per cent. Chart 2.6 shows that the rise in the participation rate reflects a 13 percentage point increase in the female participation rate to 55 per cent which more than offset a 7 percentage point fall in the male participation rate to 70 per cent.

Projections of participation rates are more contentious than population projections. This is because the assumptions underlying population projections are more robust than those required for participation rates. As an example, the chart below shows that over the last few decades there have been large trend movements in the aggregate participation rates of males and females in New South Wales (these movements in the aggregate are composed of significant moves in participation rates by age and sex).

Chart 2.6: NSW – Labour Force Participation Rate (%)



Both social and economic factors will influence participation rates over time. The ABS[10] states that:

"Some of the forces that have influenced labour force participation have been:

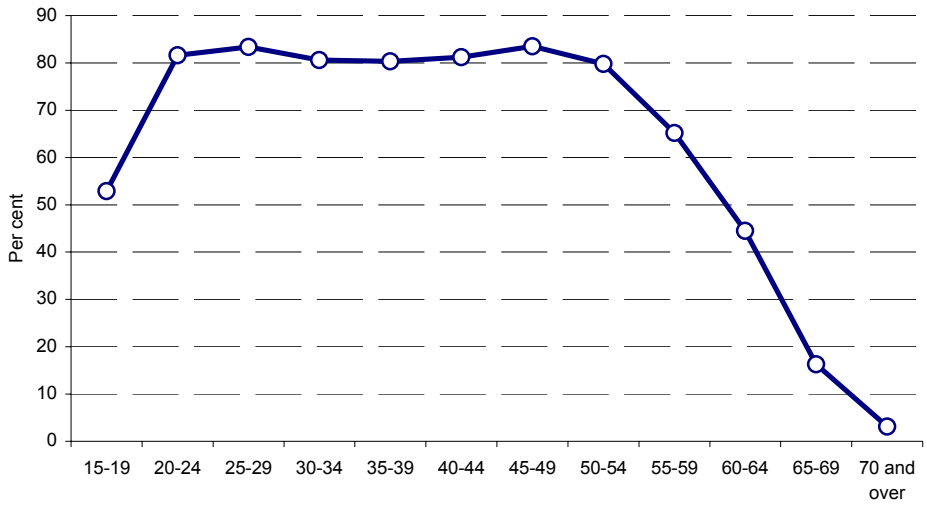
- The severity, length and frequency of the business cycle;
- Labour market law and regulation;
- Interaction between the Australian economy and international markets;
- Age at retirement;
- School retention rates and participation in education;
- Perceptions about the likelihood of finding work;

[10] *Australian Bureau of Statistics (ABS),* Labour Force Projections 1999-2016*, ABS Catalogue No. 6260.0, Canberra, September 2000.*

- Family role and responsibilities;
- Structural and technological changes to the economy;
- Wage levels;
- Attitudes towards leisure and family life relative to work; and
- Housing affordability."

In projecting into the future, should those trends be extrapolated, attenuated or perhaps reversed? The assumption used in the modelling work in this paper is for participation rates by age cohort to remain stable over the projection period at their most recent levels. The economic and fiscal results are sensitive to this assumption which is demonstrated by sensitivity analysis, including increasing the participation of those aged 65 and over, included in Chapter 4. The participation rates of those aged 65 and over is currently at low levels, as shown in the chart below.

Chart 2.7: NSW Participation Rates by Age Cohort, March 2006

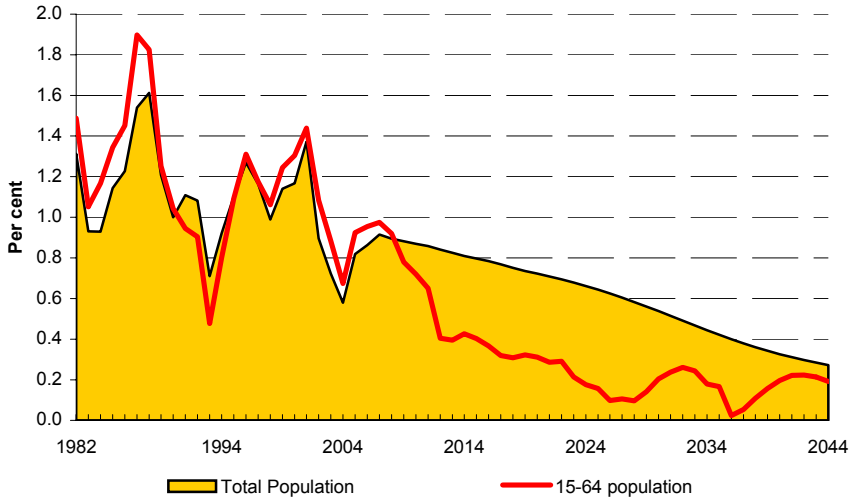


Projected Economic Outlook to 2044

Slower population growth of its own would contribute to slower employment and real GSP growth, but not necessarily a slowing in GSP per capita. The changing age composition, however, will see not only slower GSP growth but slower growth in GSP per capita.

Chart 2.8 shows that growth in the population aged 15-64 will be slower than total population growth. That age group has the highest labour force participation rates, as shown in Chart 2.7. The strongest growth in population will come from those aged 65 and over, who have lower labour force participation rates. This growth outweighs the slower growth from those aged 15-64 and hence the population aged 15 and over will grow more quickly than total population (Chart 2.9) in the projection period. However, the aggregate labour force participation rate[11] will decline over the projection period (Chart 2.10) due to the assumed lower participation rates of the growing numbers of those aged 65 and over.

Chart 2.8: Annual Growth of Total and 15 – 64 Population



[11] *The aggregate labour force participation rate is the labour force (the number of employed and unemployed) as a percentage of the population aged 15 and over.*

Chart 2.9: Annual Growth of Total and 15 and over Population

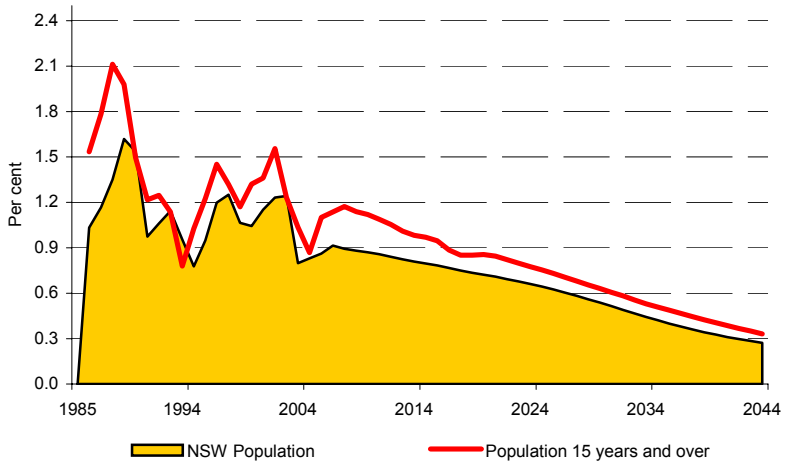
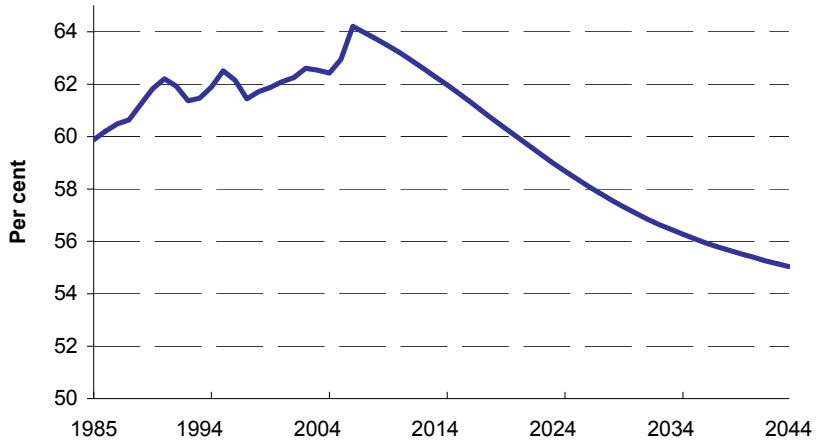
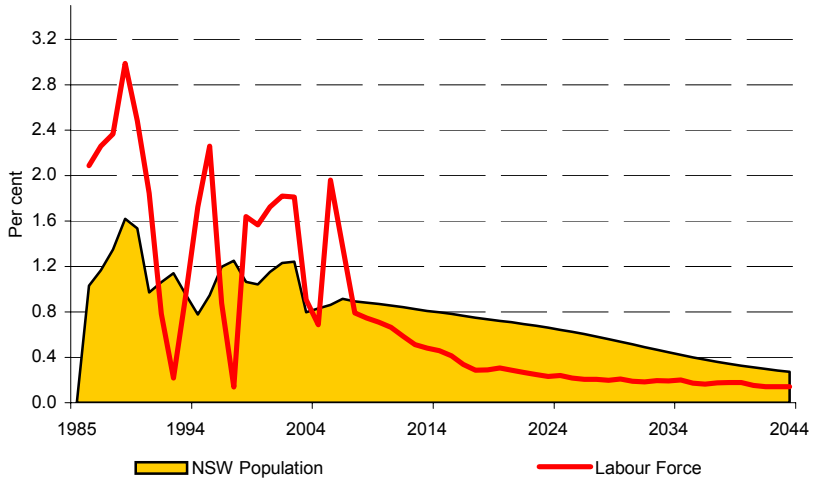


Chart 2.10: NSW Labour Participation Rate



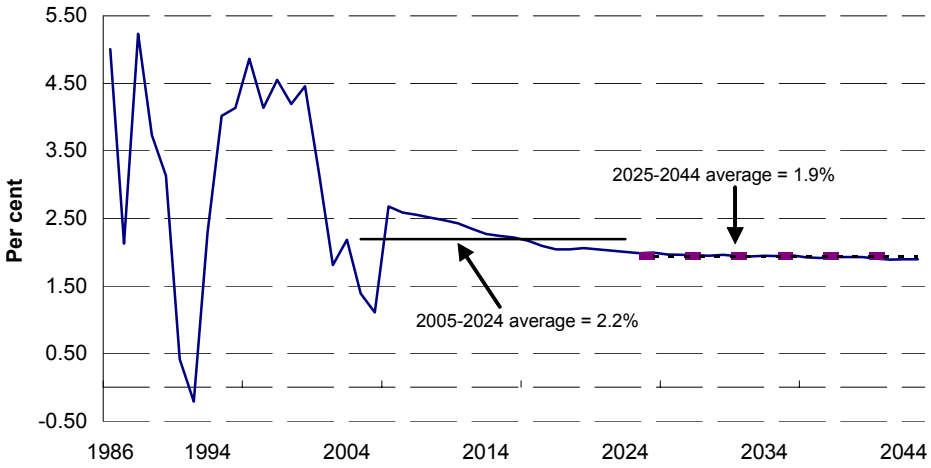
The lower aggregate participation rate in turn will mean that growth in the labour force will be weaker than population growth (Chart 2.11). With employment growing in line with growth in the labour force (that is the unemployment rate remains constant), this means that employment growth will be weaker than population growth. The gap between employment and population growth will be the greatest in the 2015-2030 period.

Chart 2.11: Annual Growth of NSW Population and Labour Force



Under the assumptions made, in the decade to 2044, GSP growth will slow to an average of 1.9 per cent per annum. With little employment growth, this means that GSP growth will be largely driven by productivity growth.

Chart 2.12: Real GSP growth projection – NSW (annual % change)



The implication of employment growing more slowly than the total population is that per capita GSP growth will slow. While living standards are expected to increase substantially, they will do so at a slower rate compared with recent experience. The projections are that there will be a slowing in per capita GSP growth from 2.1 per cent per annum in the 1990s to 1.6 per cent in the decade to 2044. Despite the slower rate of growth, living standards will improve markedly, with GSP per capita projected to increase by almost 75 per cent from 2005 to 2044.

Table 2.2 presents a summary of the key projections for the NSW economy.

Table 2.2: Growth rates of key economic variables for NSW (%)

	Decade Average						*40 year average*
	1984-85 to 1993-94	*1994-95 to 2003-04*	*2004-05 to 2013-14*	*2014-15 to 2023-24*	*2024-25 to 2033-34*	*2034-35 to 2043-44*	*2004-05 to 2043-44*
Gross state product (real)	2.9	3.5	2.4	2.0	1.9	1.9	2.1
Population	1.2	1.1	0.8	0.7	0.5	0.3	0.6
Labour Force	1.8	1.4	0.9	0.3	0.2	0.2	0.4
State employment	2.0	2.0	0.7	0.3	0.2	0.2	0.4
GSP per capita	1.6	2.4	1.5	1.3	1.4	1.6	1.4

CHAPTER 3: EXPENSES TRENDS

3.1: INTRODUCTION

This Chapter analyses the growth in general government recurrent expenses by specific policy or functional area over past decades as a guide to possible future spending pressures. Other, more general pressures on expenses trends, such as technology and community expectations are also examined.

While aggregate general government expenses in real terms have grown on average by around 3 per cent a year over the past two and a half decades, there have been significant differences in the growth rates across individual policy areas (Table 3.1). For example, in the last seven years real growth in Health, Education, Social Security, Housing and Community Amenities, Public Order and Safety and Transport and Communication has exceeded real GSP growth.

Table 3.1: Average Annual Real Growth in General Government Expenses by Function[12] (%)

	1979 to 1998	1998 to 2005
Public Order & Safety	3.3	4.5
Education	2.6	3.3
Health	3.5	3.8
Social Security	6.4	3.9
Housing & Community Amenities	9.7	4.6
Recreation & Culture	7.2	1.1
Transport & Communication	1.6	8.4
Other Expenses	2.1	-2.0
Total	**2.9**	**3.1**
Population	1.3	1.0
GSP (real)	3.8	2.8

[12] *ABS basis by Government Purpose Classification. Total expenses include interest payments on debt.*

3.2 HEALTH

The NSW Department of Health budget accounts for the largest share of any expense category at nearly $12 billion, or over 27 per cent of total general government expenses in 2006-07, and will be a critical source of spending pressures in the coming decades.

On a functional basis, the share of Health in total expenses has increased from around 24 per cent in the early 1980s. After growing by an average of 3.5 per cent per year in real terms from 1979 to 1998, growth has increased in the period since 1998 to an average of 3.8 per cent per year. Over the most recent four-year period – ending 2005 – real expenses grew on average by 5.4 per cent per annum.

The increase in health expenses is driven by four principal factors:

- a growing ageing population;
- skills shortages, reflected in rising employee costs;
- increasing consumer expectations; and
- changes in medical technology, including the availability of new and better procedures.

The 2005 Productivity Commission's *Research Report on Impacts of Advances in Medical Technology in Australia* reviewed the determinants of real expenses growth from 1993 to 2003. It concluded that on average the contribution of each determinant was: 22 per cent due to population growth; 12 per cent due to ageing; 29 per cent due to income growth; and a 36 per cent residual mainly attributed to the impact of new technology. This is consistent with many other studies that conclude that the spread and take up of new technology and medical procedures is the most significant cost driver.

Thus over one third of the overall increase in health expenses can be attributed to advances in medical technology. This is a product of both the higher cost of many new medical interventions and the increased activity that new procedures allow. For example, diagnostic imaging technologies such as MRI, CT and PET scans have increased healthcare expenses because they are both costly to operate and lead to the treatment of diseases which would not have been detected previously. Another indication of the impact of technology on expenses is that between 1999 and 2005 average annual expenses growth for drugs, medical equipment, and medical and surgical supplies has ranged from 7 to 10 per cent per year.

The community's use of health services in general has increased strongly, with higher expectations of the type of conditions that can be cured or managed. In addition, there is a lack of access to affordable GP services after hours. This means that, for most communities, the State's hospital Emergency Departments and Ambulance Service are the only around the clock health care services.

Ageing is an increasingly important factor in rising health costs because there is an increase in the number of older, frailer patients being admitted with more complex and chronic conditions, involving longer hospitals stays. For example, the number of admitted patients over 65 years of age has increased by 3 per cent per year since 2000 and now account for around 50 per cent of overnight admissions, and around 60 per cent of occupied acute care beds. This trend will accelerate as the baby boomer generation move into this age cohort in increasing numbers (Chart 2.3). The Productivity Commission's report *Economic Implications of an Ageing Australia* estimates that the anticipated rise in the average age of the population will add 25 per cent to projected government health spending by 2045.

The ageing impact may be further affected by new medical technologies and treatments. Although this will increase life expectancy, it will also increase the amount of care required. A possible offsetting factor is that new technologies and treatments may also delay the onset of disease and thus reduce the period for which care is required.

In recent years, increasing employee costs have been a key cost driver in the health budget. Around 62 per cent of the health budget goes to employee related expenses. With skills shortages in some areas such as nurses in hospitals and certain medical specialties, wage costs have increased sharply. Between 1999 and 2005 wage costs have increased by 48 per cent, with award increases of 40 per cent for nurses, an increase in staff numbers of 10 per cent, and employer superannuation contributions increasing from 6 per cent to 9 per cent. With a worldwide shortage of medical workforce relative to increasing demand, employee cost pressures are expected to continue. This will necessitate a more flexible and productive use of the health workforce.

In summary, the outlook is for cost and demand pressures in health to continue unabated over the next 40 years principally due to the impact of ageing and improved longevity on health services, and the rising cost of new medical technology.

3.3 EDUCATION

Expenses on education are the second largest category of expenses in the NSW Budget at over $10 billion in 2006-07. Education's share of total spending declined from around 29 per cent in the early 1980s to 25 per cent in the mid 1990s and has stayed around that level. Over that time period expenses per student have increased significantly.

Although expenses growth on a functional basis did appear to accelerate post 1998, measured on a comparable basis over the period 1979 to 2005, growth has been relatively even. The higher growth recorded post 1998 largely reflects changes in accounting treatment in 2004 through the inclusion of school-funded transactions.

Looking forward, expenses growth for education will be tempered by declining student numbers. The ageing of the population over coming decades will result in the proportion of the population of school age shrinking. While maintaining an improving quality of education, this presents some opportunities to redirect spending to more pressing needs.

Offsetting those trends will be non-wage factors affecting expenses in education such as trends to smaller class sizes, the greater use of technology in the classroom, and increasing costs of educating students with special needs. The new National Reform Agenda also emphasises the importance of early childhood development outcomes.

3.4 TRANSPORT AND COMMUNICATION

Expenses on transport and communication are the third largest component of spending by functional area, amounting to $5.2 billion in 2006-07, or around 11 per cent of budget expenses. Expenses accelerated over the period 1998 to 2005, more than in any other general government sector, averaging growth of 8.4 per cent per annum in real terms, and 11.3 per cent per annum in nominal terms, with Transport accounting for the majority of the growth. This high average growth rate was, however, largely driven by a change in the reporting of the Roads and Transport Authority (RTA) depreciation expenses. Excluding depreciation expenses, annual expenses in the area grew at 5.0 per cent in real terms and 7.8 per cent in nominal terms on average.

NSW general government spending on transport is dominated by grants to RailCorp (formerly the State Rail Authority), the Transport Infrastructure Development Corporation and the Rail Infrastructure Corporation and spending by the Road and Traffic Authority (RTA).

Recurrent expenses on roads increased significantly between 1998 and 2005, rising by an average of 13.6 per cent a year, largely because of an increase in depreciation charges and increased operational expenses. The increase in depreciation (of over $800 million from 1998 to 2005) followed the progressive re-valuation of the road network to reflect its modern construction costs.

Over the period 1998 to 2005, expenditure on rail increased by an average of 3.9 per cent per year in real terms. However there has been a sharp increase in funding since 2000. From 2001 to 2005 funding increased by around $650 million per annum, or 16 per cent. There are numerous factors driving increased funding for rail including: increased capital spending by rail agencies (funded by Budget grants) including the Epping Chatswood link, and around 730 air conditioned carriages, replacing around 30 per cent of the existing fleet; enhanced security (including employing 600 transit officers and a CCTV network); a significant increase in funding for CityRail maintenance; and subdued revenue growth due to modest fare and patronage increases.

Expenditure growth in transport will continue to be driven by a combination of labour costs (particularly for rail which has a workforce of around 14,000), increasing construction costs (as recent sharp increases in commodity prices feed into material prices for a time) and growing demand for both public transport and roads.

3.5 PUBLIC ORDER AND SAFETY

Expenses on providing public order and safety services in New South Wales account for 11 per cent of total general government expenses, and have been growing faster than total general government sector spending, particularly in the period since 1998.

Over the period 1979 to 1998 the real annual average growth rate for spending on public order and safety was 3.3 per cent – marginally faster than total spending. From 1998 to 2005 real expenses growth accelerated to an average of 4.5 per cent per year.

Between 1999 and 2005 the authorised number of police officers in New South Wales rose from 13,307 to 14,454 (9 per cent). The number of prison inmates grew from 6,835 to 8,927, an increase of around 30 per cent. Given that current levels of spending have achieved a steady reduction in most crime rates over time there may be an easing of expenses pressures in the future. Ageing of the population should alleviate some pressures as the bulk of current service delivery in this area is for younger age cohorts. A potential cause for accelerated spending may include heightening of concerns regarding terrorism.

3.6 SOCIAL SECURITY AND WELFARE

Expenses on social security and welfare services in New South Wales account for 8 per cent of total general government expenses. Services provided by the Department of Ageing, Disability and Home Care (DADHC), and the Department of Community Services (DoCS) account for the majority of spending in this functional category. Disability services include full time accommodation and support services such as day programs, respite care, therapy services and case management. DADHC also manages Home-Care services which provide in-home support (meals, cleaning, personal assistance, etc) for the frail aged and people with a disability.

The Department of Community Services has core responsibilities for child protection, supporting people at risk of homelessness, prevention and early intervention support services for families and out of home care for children who cannot live with their parents.

Over the past 25 years expenses on social security and welfare services have grown rapidly. From a small base, expenses have increased at an average annual real rate more than twice that of total expenses (6.4 per cent versus 2.9 per cent) between 1979 and 1998. Since 1998, real growth has been more moderate (3.9 per cent versus 3.1 per cent).

Strong demand for Department of Ageing, Disability and Home Care (DADHC) services is expected to continue, with expenditure driven by an ageing population, ageing carers, and higher costs associated with technology and enhanced life expectancy. For example, real expenses for welfare services by DADHC have grown by 6.2 per cent a year over the past 5 years.

Expenses by the Department of Community Services (DoCS) have also increased strongly over the past five years (7.4 per cent per year in real terms), more recently as a direct result of a major funding boost targeted at increasing child protection and early intervention programs, increasing out-of-home care services for children (including foster care places), and the transfer to DoCS of expenses on crime-prevention strategies targeting social problems in selected communities.

It is anticipated that with new initiatives focused on breaking the cycle of abuse by early intervention, specialist policing and victim oriented courts, there will be some moderation in the growth and level of child protection reports over time. Demand projections are difficult but may be better understood as DoCS further develops its longitudinal data collections. Demand is driven by factors such as the level of disadvantage in the community. However, changes in Government policy in the past, such as mandatory reporting, have impacted on demand. There is considerable interest at the Commonwealth and State level in the extent to which early intervention programs can further reduce child abuse and other social problems. In so far as these programs can be funded and are successful, they may mitigate demand pressures on DoCS and other agencies to some extent.

3.7 HOUSING AND COMMUNITY AMENITIES[13]

Expenses on housing and community amenities in New South Wales account for 4 per cent of total government expenses. Services provided by the Department of Housing and the Aboriginal Housing Office include government-subsidised housing managed by public, community or Aboriginal housing providers, crisis accommodation places, and financial assistance to private renters and home buyers.

Although a relatively small part of the NSW Budget, expenses have grown strongly over the past 25 years. Between 1979 and 1998 expenses grew by almost 10 per cent a year in real terms compared with the growth in total spending of 3 per cent. Between 1998 and 2005 real expenses growth slowed in relative terms, growing by 4.6 per cent a year compared to growth in total government spending of 3.1 per cent a year.

Past expenditure in housing has been characterised by periods of significant capital investment in response to client demand, asset renewal and maintenance requirements. Revenue growth from public housing has also been low due to growing proportions of clients with low incomes.

[13] *This category includes Sanitation and Environmental Protection.*

Demand and expenditure for housing support into the future is expected to remain constant but with more focus on those in greatest need. Nonetheless, the level of expenditure may vary in the future depending upon:

- future funding arrangements under the Commonwealth and State Housing Agreement;
- required investments in asset management programs to deliver new standards in the stock of properties;
- changing demographics which require a reconfiguration of stock both in location and dwelling type;
- community regeneration programs in areas of high concentrations of social housing;
- the development and implementation of innovative housing models to meet complex housing and support needs; and
- affordability levels in the private rental and home purchase markets.

3.8 RECREATION AND CULTURE[14]

Culture and Recreation is a diverse category that covers the arts and cultural institutions, the national parks reserve system, the Sydney Olympic Park Authority, sport and recreation programs and major recreation parks such as Centennial Park and the Moore Park Trust. It accounts for around 2 per cent of total general government expenses and has a volatile spending pattern. Annual real expenses grew by 7.2 per cent between 1979 and 1998 but were relatively flat at 1.1 per cent between 1998 and 2005.

Expenditure variations in this policy area are largely driven by:

- the Government's financial commitment to major events. For example the celebration of Australia's Bicentennary in 1988 and the Sydney 2000 Olympic Games; and

[14] *This category includes National Parks and Wildlife*

- the recurrent costs of the major upgrade of cultural institutions such as the Sydney Opera House and the development of new facilities such as the theatre at Walsh Bay. The period 1979 to 1998, in particular, saw the construction of many new venues and facilities in New South Wales. Apart from construction for the Olympic Games, this period saw the development of the Sydney Entertainment Centre in 1983, the Sydney Exhibition and Convention Centre in 1988 and the Sydney Football Stadium in 1988 (although a significant proportion of the funds for the latter were from "membership" contributions).

Future expenditure trends are likely to be influenced by the Government committing to support or hold major events in New South Wales. For example, World Youth Day is to be held in Sydney in July 2008. The lead times between bidding for an event, winning the event and holding the event can be some years. This makes forecasting future trends in this category difficult.

3.9 OTHER EXPENSES

This category includes the Crown, central agencies (such as the Premier's Department, the Cabinet Office and Treasury), and central service provider agencies (such as the Department of Commerce and Central Corporate Services Unit). Growth in this area can be volatile due to the Crown providing one-off financial transactions for the whole of government - for example, the Crown payment of $600 million in 2000-01 relating to the collapse of HIH. The category also includes interest costs on government debt. The overall decline in expenses in this category since 1998 reflects lower interest payments. Under the Government's fiscal strategy, general government debt has decreased from $10.4 billion in 1998 to $2.3 billion in 2005.

3.10 OTHER FACTORS IMPACTING ON EXPENSES

The fiscal projections explicitly utilise demographic and economic projections to determine growth in NSW government spending and revenue. However, analysis of historical trends shows that other factors, including some of those described above, have been important in driving expenses growth in New South Wales. These additional pressures are captured in a parameter called the 'Other Growth Factor' (OGF), which is used in the projection of functional area expenses. The OGF is calculated from historical analysis and is designed to capture pressures including higher cost pressures than the general inflation rate and higher demand for services than would be expected by demographic and economic drivers. The OGF will capture a number of trends, including the impact of technology, the environment and community expectations. While such trends are captured from a historical perspective in the OGF, they could change in the future, either adding to or reducing government spending pressures.

TECHNOLOGY

The scope for wide-ranging changes to the fiscal landscape through technology is substantial. Technological advances may result in either increased spending or cost savings depending on the technology's impact on demand or supply. Technology can increase spending by adding to public service delivery costs. Higher service delivery costs may lead to cost inflation for public services being higher than that for general consumer prices.

The technological rate of change in many areas of public spending, particularly health, appears to be speeding up (Access Economics, 2003[15]). New technologies such as gene therapy offer substantial living standard improvements by allowing the prospect of diagnosing diseases before symptoms appear, as well as for providing cures for ailments that currently cannot be treated (Owens, 2002[16]). In practice this represents an increase in demand for health services.

However, the cost per patient of using these technologies can be very high, creating significant cost pressures for public health service suppliers. Community expectations regarding the safety of new medical treatment are likely to keep health research and development costs high. Further, patient expectations for improved health servicing will continue to widen and deepen the demand for health services. For example, hospitals are producing a greater range of care despite the average length of stay in hospitals being significantly shortened. New medical treatments are displacing pharmaceuticals. A typical episode of health care now has a greater component of other hospital services such as nursing, accommodation and meals (Access Economics, 2003[17]).

On the other hand, technology can result in cost savings. Some technologies enhance a supplier's capacity to deliver a particular service. Information and communication technology advances are likely to continue to further enhance the capacity of government and public trading enterprises to reduce their processing and information dissemination costs. Interaction between businesses, consumers and government will increasingly occur in electronic environments, where information and capital transactions can move with unprecedented speed and fluidity across small isolated communities and on a global scale. Australia already ranks in the top few countries internationally for Internet penetration (NOIE, 2002[18]). This penetration has been complemented by a high take-up of internet banking, e-government and other e-commerce services.

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[15] *Access Economics, "Long-Term Fiscal Projections: Report for New South Wales versus All States and Territories", March 2003.*

[16] *Owens, H. "Building excellence in health care in a changing environment", Conference Address by the Productivity Commission to the Division of General Practice Network Forum 2002, Brisbane, 8 November 2002.*

[17] *Ibid.*

[18] *The National Office for the Information Economy, "Advancing Australia – Highlights of the Information Economy Progress Report", 2002.*

ENVIRONMENT AND NATURAL RESOURCES

Community concern over the environment is likely to intensify over time and potentially add to fiscal pressure. Greater emphasis on the sustainability of the State's natural resources is likely to increase costs and place constraints on the speed of productivity growth (Productivity Commission, 2000[19]). The community may also place a higher value on environmental outcomes over time. Environmental concerns could include salinity, climate change, pollution of water supplies, loss of biodiversity, deforestation, loss of non-renewable resources, waste and over-fishing. For example, a major salinity-repair project in New South Wales focussed on the Murray-Darling Basin is underway.

Governments are, in appropriate circumstances, pursuing market-based solutions to address environmental problems. However, infrastructure costs could rise with environmental problems such as salinity. Rising water tables could damage capital assets including roads, buildings, sports fields and parks and damage underground infrastructure such as sewerage, water supply and energy supply systems.

COMMUNITY EXPECTATIONS

Community expectations over public provision of many services could play an important role in determining spending pressures in the longer term. In general, the demand for government services grows at least in line with economic growth. However, the growth in demand for higher levels of service quality may exceed income growth.

Most government services are delivered on a below-cost-recovery basis. Accordingly, community expectations for servicing may grow out-of-line with the opportunity cost of service delivery. One example is government spending on Public Order and Safety. Community expectations for a safer community will continue to substantially increase the demand for police, security and intelligence services (Access Economics, 2003[20]) even with declining crime rates. The trend towards higher public liability insurance costs also reflects a change in community expectations about exposure to risk. This higher cost may add to spending pressures in the longer term, though recent NSW Government initiatives should help to alleviate these concerns.

[19] *Productivity Commission, "Microeconomic Reform and the Environment, Workshop Proceedings", Melbourne, 8 September 2000. http://www.pc.gov.au/research/confproc/mecrefenv/index.html*

[20] *Ibid.*

Community expectations for disadvantaged sections of society may intensify as aggregate incomes and wealth grow. For example, the community may in aggregate expect better access to government services irrespective of location. However, the willingness of communities to pay for the cost of public services they use could rise with higher aggregate incomes and wealth over the longer term. In addition, the capacity of governments to direct greater emphasis on targeting and improving social services for the most disadvantaged in society may also continue to improve (Victorian Department of Treasury and Finance 2003[21]).

In economic terms, community expectations can be regarded as the elasticity of demand for government services relative to household income growth. An elasticity greater than one means that as income grows, demand for government services will grow by more.

ECONOMIC REFORM

In February 2006, the Commonwealth and State Governments agreed to a National Reform Agenda to lift national productivity and workforce participation over the next decade. The Council of Australian Governments' reform agenda recognises that steps need to be taken to offset the likely economic burden of an ageing population. It is proposed that improvements be made to human capital and national competition policy, and that the burden of business regulation be reduced.

The overall economic benefits of the reform program are expected to be significant, but in the short term increased expenditure will be required to implement aspects of the program.

The human capital reform agenda is directed at improving the proportion of the working age population that is healthy and able to work (reducing the incidence of chronic illness and reducing health risk factors), and improving education standards (early childhood education, meeting literacy and numeracy targets, improving school retention rates and the transition from school to work). The Commonwealth has agreed to a review of Specific Purpose Payments to States that are related to health, in the light of the proposal to develop preventative and early intervention programs. However, funding arrangements between the Commonwealth and the States for new health and education programs have not yet been agreed. Given the significant spending burden that will be carried by the States, there must be a fair division of the costs and benefits.

[21] *Victorian Department of Treasury and Finance, "Shaping a Prosperous Future", April 2003.*

A new competition and regulation reform agenda has been agreed. This covers energy (eg working towards a fully national electricity transmission grid), transport (eg reducing urban congestion and congestion on national freight corridors), infrastructure regulation (already under review from 2005) and climate change (accelerating significantly the conversion to low emission practices).

CHAPTER 4: THE FISCAL GAP

4.1 INTRODUCTION

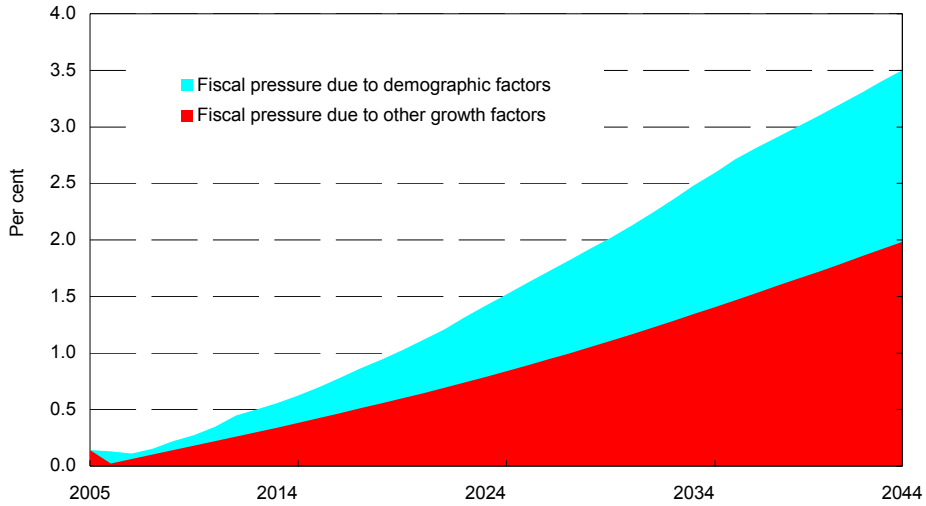
Given projections for NSW GSP growth and other economic variables, estimates of NSW general government revenue and expenses growth can be determined. Revenue estimates are determined from tax bases and assumed unchanged taxation rates, as well as assumptions about Commonwealth government transfers. Demographic changes will impact on the taxation bases. Long term expenditure estimates are based on ageing impacts, population growth, real per capita GSP growth, inflation and any past propensity for spending to rise at a pace above what the other drivers would suggest (a parameter termed the 'other growth factor').

The fiscal projections show that a build up in expenditure pressures will occur over the next 40 years, causing a significant fiscal gap to open up in the State's finances. With expenses growth exceeding revenue growth, this fiscal gap (the difference between expenses and revenue excluding interest transactions but including net capital expenditure) will grow to 3.4 per cent of GSP by 2044 (Chart 4.1).

Most of the fiscal gap is due to higher expenses growth, with total revenues slightly lower as a share of GSP. The ageing of the population accounts for around a third of the total fiscal gap[22], with the growth of the total population size accounting for a further 6 per cent of the total gap. This implies that demographic factors explain 40 per cent of the total fiscal gap, with other growth factors, if they continue to exert pressure as in the past, responsible for the remaining 60 per cent.

[22] *The ageing impacts are due to the change in the age structure of the population.*

Chart 4.1: Projected NSW Fiscal Gap 2005 to 2044



Over the next 40 years it is expected that there will be a shift in the composition of State expenses, with large increases in demand for health, and social security and welfare services, partly offset by less demand for school education.

- Growth in Health expenses is projected to be the most significant, accounting for around 75 per cent of the projected expenses gap. Health expenses as a share of GSP is projected to increase by 2.6 percentage points from 3.4 per cent of GSP to 6.0 per cent of GSP. By 2044, Health expenses would be larger than total NSW taxation revenues.

- Social Security & Welfare and Public Order & Safety expenses are also projected to increase their share of GSP by a combined 0.7 percentage points. Social Security & Welfare is projected to rise from 1.0 per cent of GSP to 1.5 per cent of GSP, while Public Order & Safety is projected to rise from 1.4 per cent of GSP to 1.6 per cent of GSP.

- Expenditure on Transport & Communication is projected to increase by 0.3 percentage points as a share of GSP from 1.5 per cent of GSP to 1.8 per cent of GSP – a result driven by the cost of improving services combined with less than full cost recovery and the higher cost of transport concessions due to ageing.

4.2 MODELLING ASSUMPTIONS

The fiscal outcomes are projected over a 39 year period, from 2005 to 2044[23], without any cyclical considerations but incorporating the influence of demographic and economic factors. The projections also assume the continuation of expenses impacts from Other Growth Factors[24] (OGF's). Clearly actual future policy settings will differ from this, as policy decisions are made in each annual Commonwealth and NSW Budget.

The fiscal projections differ from the Budget forward estimates as the latter includes impacts of policies announced in the Budget as well as cyclical movements in revenues. The analysis in this Budget Paper focuses on the primary balance rather than on the budget balance. The fiscal gap is the change between the base period and the end period primary balance expressed as a per cent of GSP. The primary balance – the gap between spending and revenue excluding interest transactions but including net capital expenditure is the preferred measure because it is unaffected by initial debt levels and interest rate assumptions. It permits analysis of fiscal pressures without the impact of deficits on debt and interest payments.

In practice, the budget balance is more relevant because it is an indicator of the sustainability of the fiscal position, and interest costs are important considerations. This report, however, is concerned with examining future pressures that may impact on fiscal sustainability, rather than fiscal sustainability per se.

4.3 ESTIMATION OF FISCAL TRENDS

TOTAL EXPENDITURE GROWTH

Long term expenditure projections are based on ABS estimates of population growth and the changing age structure, together with assumptions of future inflation, real income growth, age-specific cost drivers, and Other Growth Factors.

Isolating and highlighting longer-term historical trends of OGFs is essential in long-term projections. The relatively long historical sample period chosen for this analysis of expenses (27 years) minimises the problem of short-term fiscal policy changes unduly influencing future rates of expenses growth.

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[23] *The end year for the projection period, 2043-44, was chosen because it provided a 40 year projection period including the last year of actual expenditure data, 2004-05.*

[24] *The OGF reflects the historical growth in expenditure by functional area that is not accounted for by growth in population, inflation, output per capita growth and the effect of ageing.*

Table 3.1 above shows the historical growth in spending by functional area in New South Wales.

ESTIMATION OF THE AGEING IMPACT

The impact of ageing on government spending is projected by applying age-specific per capita cost parameters to each age group. The rationale behind this is that within government service delivery areas the use of the services can vary significantly by age. Age-specific parameters though, are often only available as activity statistics (eg, the average number of doctor visits per person by age) rather than actual per-capita cost data. Thus they provide a measure of the impact of ageing on the volume of services, rather than the total cost of the services. To the extent that costs in certain service delivery areas are rising faster than general inflation, these measures will tend to underestimate any fiscal impact.

Chart 4.2: Hospital Care Index by Age Cohort

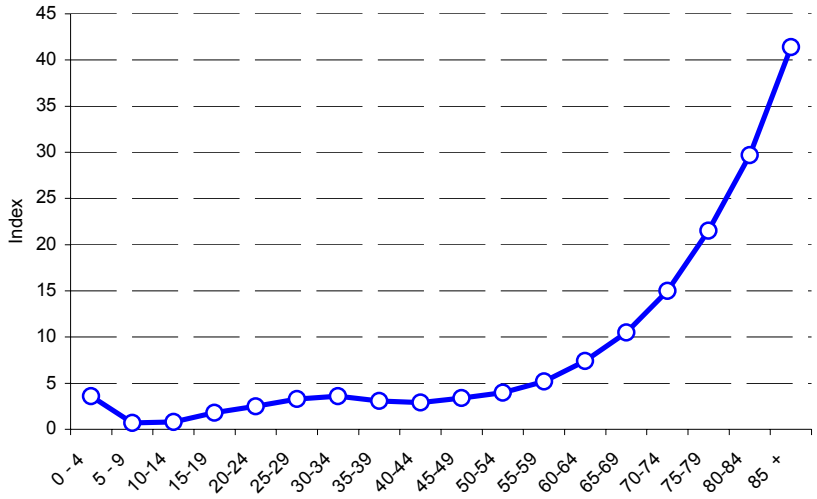


Chart 4.2 provides an example of the type of age specific parameters used in the analysis. The example is an index of the usage of hospital services in five year age cohorts. As would be expected, there is a substantial and accelerating increase in hospital usage as age rises above 65.

Ten sets of relative usage indices corresponding to five functional areas were utilised. These sets include: Health (Hospital, Aged Care, and Doctor Visits), Education (Tertiary and School), Public Order and Safety (Court, Incarceration, and Crime), Welfare (Disability) and Transport (Concessions). These indices are detailed in Appendix 1.

In the projection period, Public Order and Safety, and Education, show negative ageing impacts, reflecting the declining proportion of the population in younger age cohorts – cohorts that account for most of the expenses in these areas. There are positive ageing impacts in Health, Transport and Communication and Social Security and Welfare reflecting the increasing proportion of the population in older age cohorts – cohorts that account for much of the expenses in these areas or where transport concessions are received.

ESTIMATION OF OTHER GROWTH FACTORS

Analysis of ABS data on NSW government spending by function, as detailed in Chapter 3, reveals that some functional areas have grown at faster rates than might be expected given growth in real incomes, the general price level and demographic considerations. A complete picture of the potential fiscal pressures ahead must include not only demographic and economic assumptions, but also some extrapolation of these trends. This residually calculated growth factor is called the 'other growth factor' (OGF). Clearly the long-term fiscal projections will be sensitive to the size of the OGFs used.

The government expenses growth rates for functional areas of spending were estimated from historical ABS Government Finance Statistics (GFS) data from 1979 to 2005. The data up until 1998 is a derived accrual version of cash-based GFS data, while the data from 1998 is from actual accrual-based financial statements. Equal weighting was applied to the growth rates in the more recent seven-year period 1998 to 2005 and the 19-year period 1979 to 1998. In part that decision was made because the more recent period was considered more representative of the pressures likely to continue over the projection period, but it also reflects the fact that the more recent data is considered of better quality than the earlier data.

Adjustments were made to functional area OGF estimates:

- For certain relatively small functional areas where there was considerable volatility in the growth rates and there are no reasons to expect pressures other than from general economic growth, OGF estimates were set to zero. This is the case for Recreation and Culture and the 'Other' functional areas;

- When significant and discrete policy change clearly influenced spending;

- When historical determinants of OGF's were assessed as unlikely to continue into the future. For example, the OGF estimates derived for Social Security and Welfare and Housing using the entire historical sample period data were considered unrepresentative of future trends. Expenses growth rates in the Social Security functional area in the decade from 1979 were very high and volatile as it grew from a small base. The more reliable period was considered to be 1998 to 2005. Similarly, the Housing OGF was derived from expenses trends from 1984 onwards, excluding the earlier period of abnormally high activity; and

- For Transport and Communication, OGF estimates from 1998 were calculated excluding RTA depreciation expenses.

Table 4.1: OGF Annual Growth Rates by Functional Area, %

Public Order and Safety	0.5
Education	0.2
Health	0.7
Social Security and Welfare	0.6
Housing and Community Amenities	0.5
Transport and Communication	0.4

The OGF growth rates shown in Table 4.1 are those utilised in the expenses projections. Growth in expenses in these functional areas is assumed to be driven by economic and demographic factors and by the additional annual growth rates shown in the table.

FUNCTIONAL AREA OGF CONTRIBUTION TO FISCAL GAP

Table 4.2 shows the contribution of each functional area-specific OGF to the total fiscal gap. Of the total fiscal gap of 3.4 per cent in 2044, Health accounts for three quarters (2.6 per cent). As the table indicates, demographic factors are the largest driver of growth in Health spending, while the OGFs are less important. In other functional areas, OGFs are more important in driving growth than demographic factors.

Table 4.2: Contributions to the Fiscal Gap in 2044 (% GSP)

	Other Growth Factor (OGF)	Demographic Factors	Total
Expenses			
Public Order and Safety	0.2	-0.0	0.2
Education	0.2	-0.6	-0.4
Health	1.0	1.6	2.6
Social Security and Welfare	0.3	0.2	0.5
Housing and Community Amenities	0.1	0.1	0.2
Transport and Communication	0.2	0.1	0.3
Other	n.a.	n.a.	-0.3
Total expenses gap	**n.a**	**n.a**	**3.1**
(+ve result increases the gap)			
Revenues	n.a	n.a.	-0.3
(-ve result increases the gap)			
Total Fiscal Gap	2.0	1.4	3.4
(expenses less revenue)			

EXPENSES SHARES BY FUNCTIONAL AREA

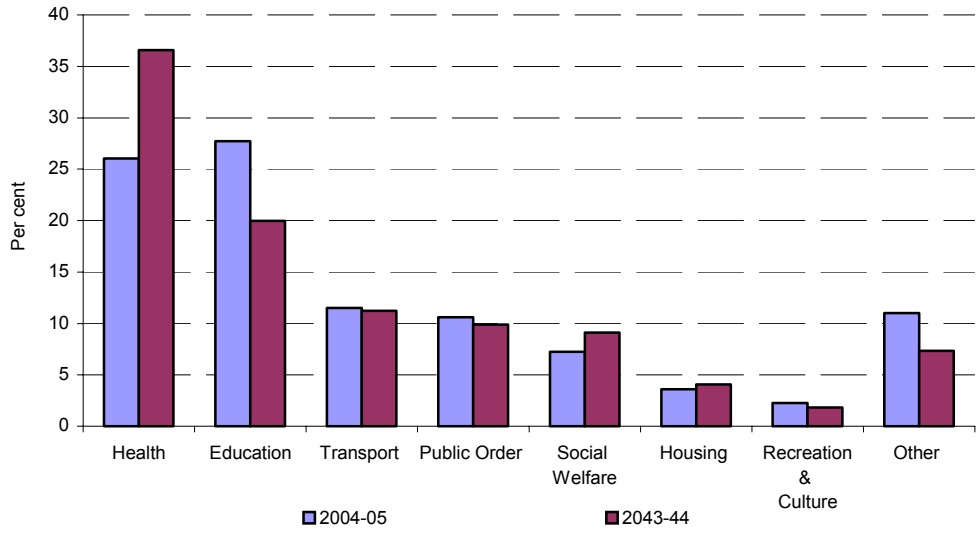
Chart 4.3 shows the shares of the functional areas in total expenses (excluding interest payments[25]) for 2005 and 2044. The shares change over the projected period because each particular functional expenses area has different growth rates.

- Health's share of total expenses increases dramatically from 26.0 per cent to 36.6 per cent.

[25] *The shares shown in this Chart will be different to shares shown in other Budget Papers because interest payments are excluded from total expenses.*

- Social Security and Welfare's share of total expenses increases from 7.3 per cent in 2005 to 9.1 per cent in 2044.
- Transport and Communication remains constant at around 11 per cent.
- Education's share of total spending declines from 27.7 per cent to 20.0 per cent.
- Public Order and Safety's share also declines, though less dramatically, from 10.6 per cent to 9.9 per cent of total expenses.

Chart 4.3: Expense Share by Function



REVENUE PROJECTIONS

Total revenues for New South Wales are projected to decline only slightly as a share of GSP over the 40 year horizon. The composition of revenue, however, will change. GST revenue will decline by 0.3 per cent as a share of GSP over time because the non-GST components of private consumption, especially private health spending, will grow faster than the taxable components. That is, over the long-term, the GST tax base will decline.

Own-source tax revenue is projected to decline slightly, mainly due to contracting relative tax bases for property transfer duties. The relative decline in transfer duties is due to slower growth in the population in the household formation stage, since property transactions (both investment in new homes and turnover of existing homes) are most frequent in this phase of the life cycle. Payroll tax revenue almost remains the same as a share of GSP. This reflects growth in employment and wages broadly in line with nominal GSP growth.

Non-tax own source revenues are projected to increase their relative share of total revenue. A major component of non-tax own source revenues is sales of goods and services, which is assumed to be a fixed share of total expenses. Since total expenses are projected to increase as a share of GSP, non-tax own source revenues will also increase.

New South Wales' portion of total Specific Purpose Payments from the Commonwealth is projected to decrease reflecting slower growth of the NSW population relative to the rest of Australia.

Less certain are the implications of a larger aged population for revenues dependent on asset markets. As more of the population moves into retirement it is unclear whether an aggregate shift from net saving to net consumption will lead to a decline in the turnover of asset holdings. Further, the slowdown in birth rates and household formation may be accompanied by a down shift in house sales.

4.4 IMPLICATIONS FOR STATE FINANCES

Table 4.3 shows the overall fiscal pressures from the major components of revenues and expenses between 2005 and 2044.

Table 4.3: Projected Changes in Fiscal Pressures and Fiscal Components between 2004-05 and 2043-44

Revenue Gap	
Own source tax	-0.2
Other own source	0.3
General Purpose Payments	-0.3
Specific Purpose Payments	-0.1
Total Revenue Gap	**-0.3**
Expenditure Gap	
Public Order & Safety	0.2
Education	-0.4
Health	2.6
Social Security & Welfare	0.5
Housing & Community Amenities	0.2
Transport & Communication	0.3
Others	-0.3
Total Expenditure Gap	**3.1**
Fiscal Gap (expenditure less revenue)	**3.4**

One clear implication of these results is that with unchanged policy settings the key fiscal targets in the *Fiscal Responsibility Act 2005 (FRA)* are unlikely to be achieved over the longer-term. These targets are:

- the *FRA* debt target (to maintain general government underlying net debt as a share of GSP at or below its level at June 2005); and

- the *FRA* net financial liabilities target (to reduce the level of general government financial liabilities as a share of GSP to 6 per cent or less by 30 June 2015).

The size and longevity of the fiscal gap suggests that funding via debt is not feasible. For example, general government debt would grow to 75 per cent of GSP in 2044 if the fiscal gap was not addressed by other means. If interest payments on that debt were included, the 3.4 per cent of GSP fiscal gap would double to 6.8 per cent of GSP.

It could be argued that over a 40 year period, real growth in the economy will provide sufficient growth in real household disposable incomes for households to fund a larger government sector through higher average tax payments. While possible, such a development would contradict the trend of at least the last decade, when state revenues as a share of the economy have been flat or declining. In addition to that trend, the current tax bases available to the State would not be capable of supporting the extent of revenue growth required to close the fiscal gap.

Therefore some policy adjustment would seem unavoidable if New South Wales is to successfully steer through the demographic transition and meet essential needs without jeopardising its fiscal sustainability.

Part of the reason for setting conservative medium-term (to 2015) net debt and net financial liability targets in the *Fiscal Responsibility Act 2005* was to provide a buffer against the impact of expected spending pressures in coming decades.

4.5 SENSITIVITY ANALYSIS

SPECIFIC PURPOSE PAYMENTS (SPPS)

The extent of fiscal pressures on the State is highly sensitive to assumptions regarding the funding of SPPs. To the extent higher spending pressures at the State level are not reflected in higher SPPs, there will be more fiscal pressure on the State and less on the Commonwealth. Table 4.4 shows fiscal gap outcomes under different combinations of Commonwealth funding options. One extreme is for the Commonwealth to fund State expenses based on the CPI inflation rate plus population growth. On that basis, States would not be fully funded for the total growth in service demand. Another option is for SPPs to be funded on the basis of the growth in total costs. The base case scenario used a 50:50 weighting of these two alternatives, which may be optimistic given recent trends in SPP funding.

Table 4.4: Fiscal Gaps under Alternative SPP Funding Assumptions

Ratio of *CPI + Population Growth Funding : Total Cost Funding*	*Fiscal Gap % of GSP*
100:0	4.3
65:35	3.7
50:50 (base case)	**3.4**
35:65	3.0
0:100	1.8

COMMUNITY EXPECTATIONS (REAL INCOME EFFECTS) AND ECONOMY-WIDE PRODUCTIVITY

One of the assumptions underpinning the long-term fiscal modelling is that any real income growth is matched by growth in government expenditure (i.e. the real income elasticity of government expenditure is equal to one). The significance of this assumption is that economic growth per se will not ease the fiscal gap. As living standards improve, the demand for government services is assumed to increase in step. It also implies that economy-wide improvements in productivity, though they will raise living standards, will have little impact on the State's fiscal gap (unless combined with lowered community expectations).

Table 4.5 reports the projected fiscal gap under various combinations of real income elasticities and productivity growth assumptions.

Table 4.5: Impact of Productivity Growth and Real Income Elasticities on Fiscal Gap

		Productivity Growth			
		1.50%	*1.75%*	*2.00%*	*2.50%*
Real Income Elasticities	100%	3.3	**3.4 (base)**	3.4	3.6
	70%	2.2	2.1	2.1	1.7
	50%	1.6	1.4	1.1	0.7

In the base case scenario, the fiscal gap more than halves from 3.4 percentage points to 1.4 percentage points when community expectations are lowered so that only half the increase in real GSP growth is reflected in higher growth in government spending. If the reduction in community expectations is accompanied by a 0.75 percentage point improvement in state-wide productivity growth, the fiscal gap is lowered to just 0.7 percentage points of GSP. This sensitivity analysis demonstrates that productivity growth becomes more powerful in influencing the fiscal gap when community expectations are lowered.

GOVERNMENT PRODUCTIVITY IMPROVEMENT

While state-wide productivity improvement will not by itself improve the projected State fiscal gap, an improvement in productivity in the general government sector will have a clear impact.

Model projections show that the base case fiscal gap of 3.4 per cent of GSP could be entirely eliminated by an annual increase in general government productivity of 0.8 per cent – over and above that of economy-wide productivity growth.

If the productivity improvement was delayed by five years, the annual improvement required to close the gap would rise to 0.9 per cent per annum. If it were delayed by ten years, the annual improvement required would rise to 1.1 per cent per annum.

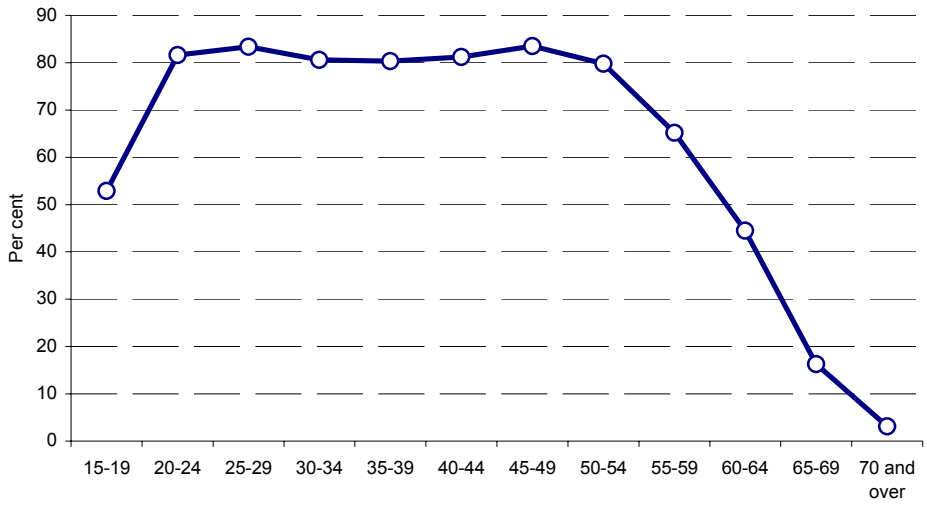
The beneficiaries of the productivity improvements should include the State's taxpayers (the capital owners) as well as employees.

SENSITIVITY TO POPULATION AND PARTICIPATION PROJECTIONS

Sensitivity analysis of the assumptions underlying the ABS population projections shows that while fertility and migration can have an impact on the size (and growth rate) of the population, they have a limited impact on the aged dependency ratio, which tends to drive the fiscal results. The sensitivity analysis suggests that the ageing of the population will be impossible to avoid given past declines in fertility rates and increases in life expectancy.

Improvements in participation of people aged 65 and over, a matter the Federal Government is encouraging to some extent through superannuation changes, would provide some modest assistance in lowering the fiscal gap. Participation rates by age cohort are illustrated in the Chart below. An immediate one percentage point increase in participation for those aged 65 and over would lower the NSW fiscal gap by just 0.05 percentage points. Improvements on this front alone are not likely to be sufficient to eliminate the fiscal gap. For example, a very significant increase in the participation rate for the 65-69 age group (from its current level of 16.3 per cent to 44.5 per cent, the level of the 60-64 age group), would improve the fiscal gap by only 0.4 per cent, from 3.4 per cent to 3.0 per cent.

Chart 4.4: NSW Labour Participation Rates by Age Cohort March 2006



CHAPTER 5: POLICY OPTIONS

5.1 PLANNING FOR THE FUTURE

The analysis in this report shows there are major gains from starting a response early, rather than waiting until a problem reaches larger proportions. Even small changes now to factors such as labour force participation, economy wide productivity, public sector productivity and community expectations will alter fiscal and economic outcomes four decades from now.

5.2: HOW PUBLIC POLICY CAN BE USED TO IMPROVE OUTCOMES

MANAGING THE ECONOMY

A healthy economy and a strong state balance sheet are central to planning for the State's financial future. Policies to promote these objectives in New South Wales are detailed in the Budget Papers. The Premier has announced:

- tax cuts;
- providing incentives for regional growth;
- opening New South Wales to new skilled migrants;
- the extension of an efficiency dividend in the general government sector to 2007-08 and 2008-09; and
- specific saving initiatives as announced in the February 2006 Economic and Financial Statement.

As discussed earlier, economic growth can be split into three principal components: population growth, participation in the workforce and productivity growth. There is little that the NSW Government can do regarding population growth, as responsibility for direct policies in this area (such as immigration) rests with the Commonwealth Government. That said, the NSW Government is actively pursuing means to encourage new skilled migrants to the State.

Population growth in the 15 to 64 years age group will inevitably slow over coming decades due to lower past and prospective fertility rates and the passage of the baby-boomers into retirement age. Feasible changes to immigration policies in the future would only have a small impact on that process. Assuming no change in participation rates or productivity growth, this would see NSW GSP growth nearly halve, from an average of 3.5 per cent per year over the decade to 2005 to an average of 1.9 per cent per year over the decade to 2044. Chart 2.12 shows that this slowing in GSP growth is progressive over the next 40 years. This is not a New South Wales specific issue, but rather one that the country as a whole faces.

The responsibility for policies that have major impacts on labour force participation rates lies with the Commonwealth Government. The States influence labour force participation largely through public sector workforce policies, education and technical training, and public health policies.

One key area of the economy that a State government can exert some influence over, and which can contribute to a lift in GSP growth and living standards, is state-wide productivity growth. If, for example, productivity growth was to increase by an extra one half percentage point per year, real incomes would be approximately 22 per cent higher over a 40 year period.

The key mechanisms that the NSW Government is using to influence productivity growth include:

- providing high quality education and training and improving human capital;
- removing regulatory and other red tape barriers for private businesses;
- improving competition in the private sector (via national competition and regulation policy initiatives);
- adopting best practice in the provision of economic and social infrastructure (including improving the productivity and efficiency of public trading enterprises);
- the efficiency of tax design and policy; and
- improving public sector productivity in New South Wales.

MANAGING STATE EXPENDITURES AND REVENUES

There appears to be a much larger range of tools available to the State to manage the fiscal position in the future compared with economic growth levers. For example, higher productivity in government and government owned-enterprises, improved cost efficiency in service delivery, reductions or reprioritisation of certain service deliveries, reducing overlap and duplication between the State and Federal Governments and improved or higher revenue collections are all options. These options are considered in detail below.

Growing expectations – a partnership with the community

While faster State-wide productivity growth will raise GSP growth and revenue growth, one key assumption underpinning the analysis in this Paper is that improvements in real incomes will result in higher service expectations by the community. Given that these services are overwhelmingly funded from taxpayer revenue, this assumption means that higher productivity growth will not close the fiscal gap. While higher productivity growth will raise living standards and incomes, the State's additional tax dollars would be exhausted by the higher costs of additional service delivery.

There is a need for informed dialogue between the State Government, the Commonwealth and the community about expectations of public services and how these legitimate expectations of better services are to be accessed and funded.

In health especially, there is no limit to how much can be spent providing people with the best quality of care. The costs, however, have to be managed in order to educate children, provide home care for the aged and disabled and provide essential infrastructure and law and order. At the present rate of escalation, the requirements of the health budget will preclude expansion or innovation in all but the most essential of other government services. At the extreme, as indicated in these projections, health spending would consume all NSW State taxation in 40 years' time.

Improved general government service delivery

While state-wide productivity improvement will not by itself improve the projected State fiscal gap, an improvement in labour productivity in the general government sector will definitely help.

Being able to provide the same volume of service output with fewer inputs would lessen the cost of providing services. Alternatively, the higher demand for services could be met with the same level of inputs. An improvement of one-half a percentage point in general government sector productivity each year relative to economy-wide productivity growth sector would compound, and costs would be approximately 22 per cent lower at the end of 40 years. Model projections show that the base case fiscal gap of 3.4 per cent of GSP could be entirely eliminated by an annual increase in general government productivity of 0.8 per cent – over and above that of economy-wide productivity.

Delivering productivity gains year after year may prove difficult. Nonetheless, sustained productivity improvement in the general government sector would seem to be an essential part of the process of adjusting to the fiscal pressures ahead. To that end, the Government has mandated efficiency improvements in the NSW general government sector of $300 million in 2005-06, 2006-07 and 2007-08, with further ongoing savings of $200 million from 2008-09.

Starting productivity improvement now is important. As the modelling results show, if the productivity improvement was delayed by five years, the annual improvement required to close the fiscal gap would rise to 0.9 per cent per annum. If it were delayed by ten years, the annual improvement required would rise to 1.1 per cent per annum. In today's dollars, a 0.8 per cent improvement amounts to efficiency gains of around $300 million per annum. A 1.1 per cent improvement would amount to an efficiency gain of over $400 million per annum in today's dollars.

In addition to productivity improvement, general government cost growth can be reduced via slower growth in input costs such as wages and capital. Slower than economy-wide wage growth in general government employee wages would not be sustainable over the long term as wage relativities would become distorted. However, given recent trends, where New South Wales public sector employee wages growth has been above that of the NSW private sector, some restraint in coming years would appear appropriate. The Government has indicated that future wage agreements will maintain the significant real wage increases gained by the NSW public sector employees over the last decade.

The task on the expenditure side is not small if the fiscal gap is to be managed and closed, while at the same time maintaining service delivery. However, a combination of improved productivity, realistic growth in wages and other costs and reduced community expectations would provide considerable assistance in addressing the issue.

Improved revenue performance

The largest concern in the long-term revenue outlook for the State is the funding of SPPs. As discussed in Chapter 4, the more weight that is given to population and CPI funding and the less to funding total demand, the larger the fiscal gap will be for the State and the less the fiscal gap for the Commonwealth.

Cooperation between the Commonwealth and States will become increasingly important. There are a number of spending areas where the States and Commonwealth share funding responsibilities. An integrated and collaborative approach to policy development is needed to minimise fiscal risks and ensure more sustainable, effective service delivery.

Collaboration will also be required since GST as a share of GDP is projected to decline over time. The tax base for GST grows more slowly than GDP, primarily because of the impact of ageing on (non-GST taxable) health expenditures, which grow more quickly than GST taxable components.

A more comprehensive review of spending and taxation powers and responsibilities between jurisdictions is perhaps one of the most important solutions to the long-term fiscal pressures that the nation faces. Associate Professor Warren's report comparing and benchmarking Australian and international arrangements for the allocation of taxation powers and expenditure responsibilities between central and subnational governments, and mechanisms for fiscal transfers between governments found that a review would help the nation meet the challenges of an ageing population.

Warren found that, "Australia performs comparatively poorly in international comparisons of intergovernmental fiscal arrangements. A review in the national interest is overdue and essential if Australia is to adequately meet the challenges of an ageing population. International experience shows that comprehensive reform to intergovernmental fiscal arrangements is being undertaken in many federations.

Australia's system of intergovernmental fiscal arrangements is characterised by very high vertical fiscal imbalance (VFI) due to inadequate State tax powers, and complex and high level equalisation. These arrangements hinder adjustments in the economy that are essential for the economy to develop and grow, as it must if Australia is to meet future challenges."[26]

[26] *Ibid*

One issue on the revenue side relates to intergenerational equity issues. While it is not true that state tax revenues are solely dependent on those in the workforce, the growing wedge between population growth and growth in employment embodied in the projections suggests that revenue collected per employee will increase substantially over the next 40 years. Governments must explore ways of preventing an unreasonable fiscal burden being passed on to subsequent generations.

APPENDIX 1: AGEING IMPACTS ON GOVERNMENT FUNCTIONAL EXPENSES

The long-term model uses ten sets of relative age-cohort specific usage indices corresponding to five functional areas. These sets include:

- Hospital care, Aged care, and Public Health care usage indices for Health
- Tertiary and School participation indices for Education
- Crime, Court finalisation and Incarceration indices for Public Order and Safety
- Disability index for Social Security and Welfare
- Public Transport Concession index for Transport.

The definition of each index is described in Table A.1.

Table A1: Definitions of Cost Indicators

Function	*Indicator*	*Definition*
Public Order & Safety	Crime Index	Victimisation rates (the ratio of the number of victims to the age-cohort population).
	Court Finalisation Index	The rate of the number of defendants finalised by age cohort.
	Incarceration Index	The rate of the number of prisoners by age cohort.
Education	School participation Index	School participation rates by age cohort.
	Tertiary Education participation Index	Tertiary Education participation rates by age cohort.
Health	Aged Care Index	The proportion of those aged 60 and above living in aged care accommodation. These parameters only exist for cohorts aged 60 and above.
	Hospital Care Index	The number of days spent in hospital per head by each age cohort, giving a weighted profile of hospital usage.
	Public Health Care (Doctor Visit) Index	The rate for general practice encounters against population levels by age cohort.
Welfare	Disability Index	The share of the population with a disability, by age cohort.
Transport	Public Transport Concession Index	Share of consumption on public transport by age cohort.

The scales of the above age-cohort specific usage indicators are adjusted to make the total population usage index equal to 100 for the base year. The following charts show the relative scale measures for the five functional areas.

Chart A1 shows that the highest demands for law and order services are generated from the younger aged groups from 15-19 to 25-29.

Chart A1: Relative Demand Index for Public Order and Safety by Age Cohort

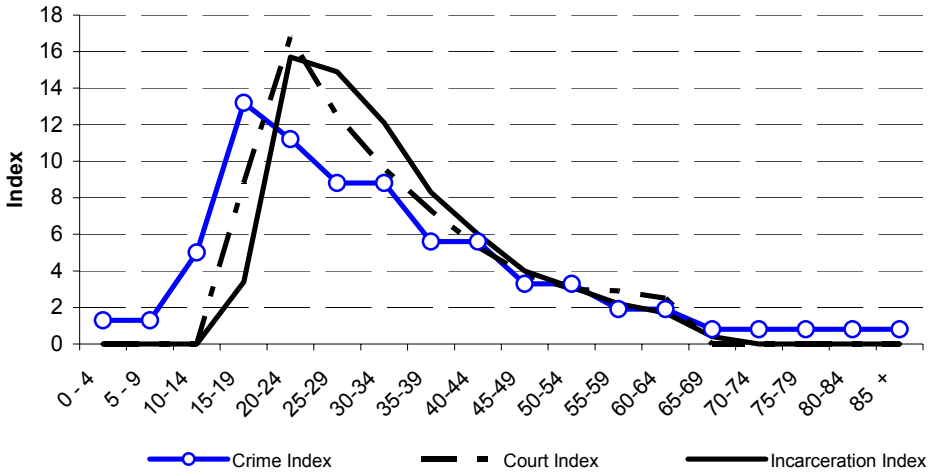


Chart A2 shows that the usage profile for education services reflects school ages, but at the tertiary level, there is wider spread over age cohorts.

Chart A2: Education Participation Index by Age Cohort

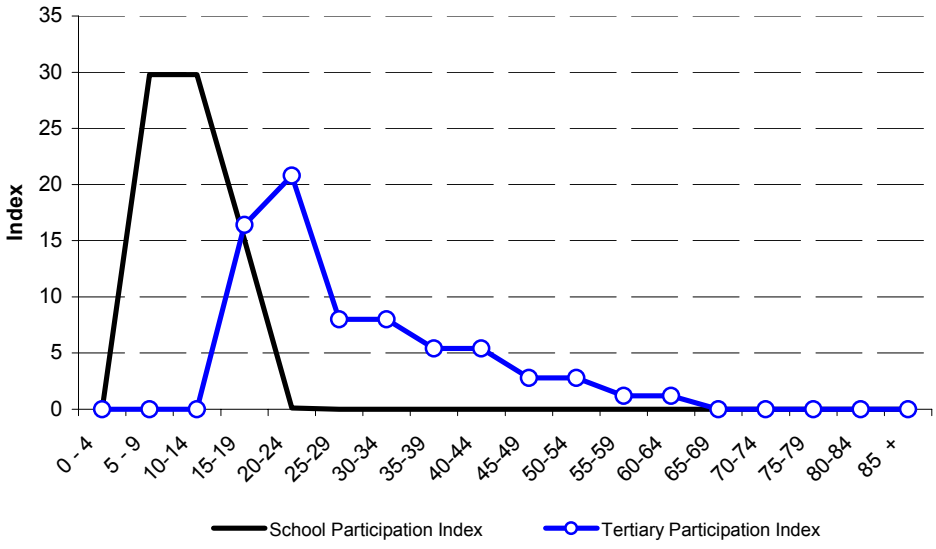


Chart A3 shows the heavy skewing of health usage by older age groups.

Chart A3: Usage Index of Health Services by Age Cohort

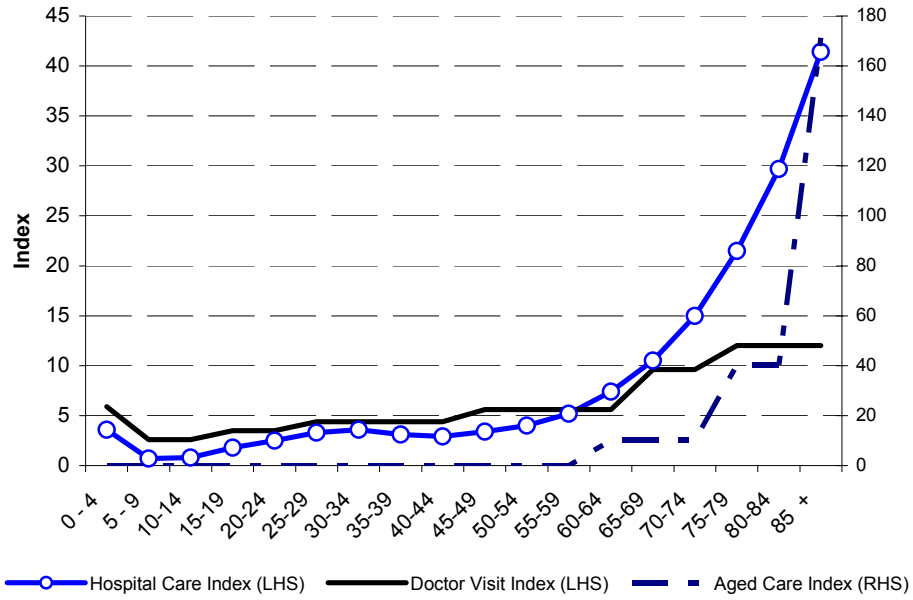


Chart A4 indicates the age specific nature of disability services. It also indicates that transport concessions are spread reasonably evenly through most age groups once secondary school is commenced.

Chart A4: Usage Index of Disability Services and Public Transport by Age Cohort