

OUR FISCAL CHALLENGE

Without corrective action, the fiscal gap is projected to be 3.4 per cent of GSP in 2055-56.

This gap comes about because expenditure growth (excluding interest) averages 5.3 per cent per year, while revenue growth (excluding interest) averages 4.7 per cent, for the reasons set out in previous chapters.

Expenditure growth exceeding revenue growth by 0.6 percentage points a year means debt would mount, as borrowing would be required to fund the expenditure. The accumulation of debt would be so large that in 2055-56 around 20 per cent of revenue would have to be diverted from services to fund interest payments. This is not sustainable.

Our ageing population is a key driver of the fiscal gap as, unlike other factors, it acts on both revenues and expenses but in opposite directions. Ageing drives higher expenses in health — partially offset by lower education costs — and reduces revenues.

Of course good and sensible government, reinforced by the provisions of the *Fiscal Responsibility Act 2012 (FRA)*, requires that we ensure the sustainability of the State's finances, so that future generations do not have to pay for the services provided to previous generations. Therefore it is critical not only to understand the magnitude of the gap but also to examine ways to reduce it.

Sensitivity analysis shows that the long-term fiscal gap would fall if housing supply increased, the efficiency and effectiveness of government service delivery improved, state revenue improved, and state-wide labour productivity and workforce participation increased. Policy options that could support these outcomes are further discussed in Chapter Seven.

The modelling shows that reducing the impact of ageing, through a strong jobs market and increasing housing supply to attract migrants to New South Wales, is central to addressing the fiscal gap. Loosening the historic connection between economic growth and the demand for government services is also important.

The fiscal gap is not solely within the control of the Government. A number of factors influence the size and growth of the gap, including general economic conditions in the Australian and NSW economies, as well as policy decisions by the Commonwealth Government.



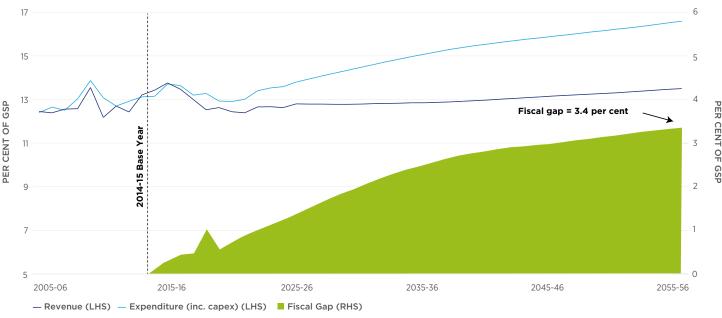
A fiscal gap of 3.4 per cent of GSP is projected in 2055-56 if no action is taken.

6.1 The fiscal gap

The long-term fiscal gap estimates how fiscal outcomes could evolve over the next 40 years. The fiscal gap is the projected change in revenues less expenditures — including net capital expenditure, but excluding interest transactions — as a percentage of GSP. The change is measured between the base year 2014-15 and the end of the projection period in 2055-56.

The fiscal gap, which is projected to be 3.4 per cent in 2055-56, occurs because over the next 40 years, revenue (excluding interest) is expected to grow at an average of 4.7 per cent a year, while expenditure (excluding interest) grows at 5.3 per cent. This is illustrated in Chart 6.1, which shows revenue, expenditure — including net capital expenditure — and the fiscal gap, as shares of GSP, from 2005-06 to 2055-56.





Source: NSW Treasury

Note. The fiscal gap in 2018-19 is high due to around \$3.4 billion of Public Private Partnerships recognised in that year, mostly in transport assets.

The successful implementation of savings measures and a disciplined approach to spending has maintained expense growth below revenue growth since the 2011-12 Report. Consistent with the 2015-16 Half-Yearly Review, revenue and expenditure are expected to remain in relative balance through the forward estimates.

Through the 2020s long-term pressures are expected to increase as revenue fails to keep up with expenditure and the fiscal gap grows through the projection period. In 2055-56 the fiscal gap reaches \$17.3 billion (in terms of today's GSP) and accounts for more than 20 per cent of the State's expenditure.

The fiscal gap is a measure of fiscal pressure, rather than fiscal sustainability, as it does not include accumulated debt and the consequent interest costs. In reality, future operating deficits would be amplified by a build-up of debt and interest payments.

The long-term fiscal gap of 3.4 per cent of GSP is not sustainable, as is illustrated in Chart 6.2, which shows the build-up of debt and interest implied by the fiscal gap. Debt levels are projected to remain at modest levels into the 2020s as the substantial infrastructure program is funded by the Government's asset recycling strategy, rather than debt.

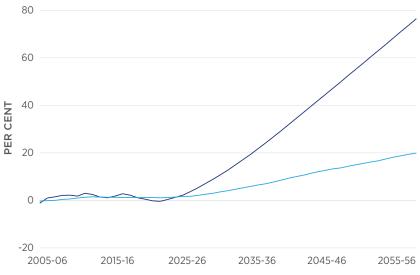
In 2055-56 the fiscal gap reaches \$17.3 billion (in terms of today's GSP) and accounts for more than 20 per cent of the State's expenditure.

¹ For comparison, in the 2015-16 NSW Half Yearly Review, the opening position in the fiscal gap chart is net lending less net interest expenses—interest revenues less interest expenses—as published in the general government sector operating statement.

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The Fiscal Responsibility
Act 2012 requires
governments to contain
expense growth to below
long-run revenue growth,
and to maintain the State's
triple-A credit rating.

Chart 6.2 Net interest expense expected to climb to 20 per cent of revenue by 2055-2056



— Net debt as a share of GSP — Net interest expense as a share of revenue (inc. interest)

Source: NSW Treasury

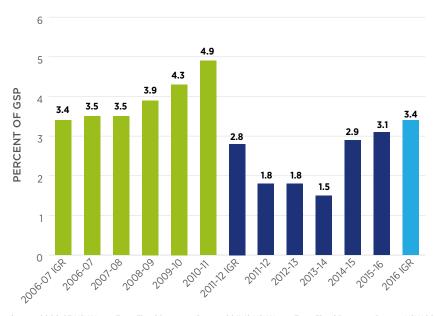
A fiscal gap of 3.4 per cent, if allowed to eventuate, would mean net debt would reach around 75 per cent of GSP and net interest payments would make up nearly 20 per cent of total revenues. In this scenario, over time the government's revenues would increasingly be consumed by interest payments, leaving less for services or infrastructure.

Such a scenario would, in practice, not be allowed to happen. Governments would have to respond with corrective measures well before this outcome materialised. The *FRA* requires governments to contain expense growth below long-run revenue growth, and to maintain the State's triple-A credit rating. As such, this Report measures the fiscal gap to present an indication of the magnitude of the task we face, and is not in any way an attempt to predict budgets up to 40 years in the future.

6.2 How the long-term fiscal gap has evolved

The FRA requires an update to the long-term fiscal gap every year in response to government policy decisions and changes in the demographic, economic and fiscal outlook. The evolution of the fiscal gap since 2006-07 is set out in Chart 6.3.

Chart 6.3 History of the long-term fiscal gap



Source: 2006-07 NSW Long-Term Fiscal Pressures Report, 2011-12 NSW Long-Term Fiscal Pressures Report, NSW 2006-07 to 2015-16 Budgets

The first report, published in 2006-07, projected a fiscal gap of 3.4 per cent of GSP in 2043-44. Driving this was the ageing population, declines in workplace participation, slowing economic growth and increasing expense growth — particularly in health. Subsequent policy decisions caused the fiscal gap to widen to 4.9 per cent by the time of the 2010-11 Budget.

The projected fiscal gap was recalibrated to 2.8 per cent of GSP in the 2011-12 Report. This change reflected more up-to-date migration and fertility assumptions, which reduced ageing pressures. Improved data on the age sensitivity of health expenses resulted in lower, but still large, ageing-related health pressures.

The 2011-12 Budget saw a further reduction in the fiscal gap of 1.0 percentage points, due to the National Health Reform Agreement reached with the Commonwealth Government in 2010-11 (0.6 percentage points) and savings measures taken in the 2011-12 Budget, including wages policy, efficiency dividends, program savings and procurement reform (0.4 percentage points).

Cumulative changes over the five years since the last report increased the fiscal gap estimate to 3.1 per cent as set out in the 2015-16 Budget. Over this time most of the larger movements in the fiscal gap — both on the upside and the downside — were the result of Commonwealth funding decisions. The Commonwealth Government's 2014-15 Budget decision to abolish health funding guarantees and change indexation arrangements increased the fiscal gap by 1.3 percentage points.² In contrast, the Commonwealth agreement on the National Disability Insurance Scheme in 2012-13 reduced the fiscal gap by around 0.4 percentage points.

The fiscal gap estimate in this Report is higher than in the 2015-16 Budget, mainly as a result of updated demographic assumptions and the newly modelled impact of housing constraints on migration flows.

² In the 2014-15 Budget, the Commonwealth announced it would limit indexation of state and territory health funding to growth in population and the CPI, rather than actual health cost growth, which is significantly larger

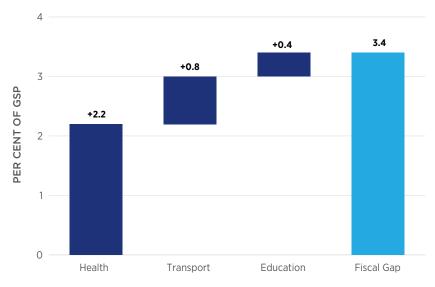
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Ageing contributes
2.2 percentage points or
65 per cent of the fiscal
gap.

6.3 The composition of the fiscal gap

Chart 6.4 shows that health expenses make-up around 60 per cent of the long-term fiscal gap. Transport and education expenses make up the rest. The impact of the other expense categories and net capital expenditure are negligible and broadly offset each other.

Chart 6.4 Fiscal gap driven by increasing health, education and transport expenses



Source: NSW Treasury

The size of each sector's contribution to the fiscal gap depends both on the sector's absolute size and the extent to which its expense growth rate exceeds GSP growth. The largest component of the fiscal gap is health — contributing 2.2 percentage points, which is the largest share of NSW expenditure and has the fastest projected growth rate. Transport, which grows almost as fast as health, only contributes 0.8 percentage points as it represents a smaller share of expenditure. While education grows more slowly than either health or transport, it accounts for the second largest share of expenditure and therefore contributes 0.4 percentage points to the fiscal gap.



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6.4 The impact of ageing on the fiscal gap

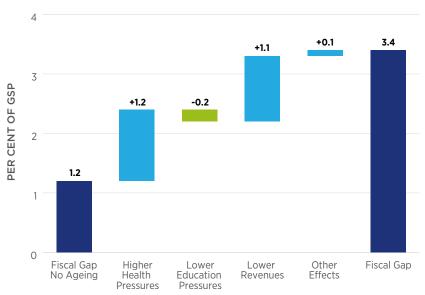
Ageing is different to major drivers of revenues and expenses in that it acts on both revenues and expenses, but in the opposite directions. Ageing reduces revenues and increases expenses and this compounds its impact on the fiscal gap.

An increase in real GSP per capita, inflation or population will increase both revenue growth and expenditure growth. An increase in revenue can at least partially offset the impact of increased expenditure. Any impact on the fiscal gap from factors like GSP, inflation and population is therefore moderated.

To show the significance of the ageing effect we have run a scenario where the population as a whole does not age. The 'no ageing' scenario is projected by keeping the current age structure of the NSW population constant into the future — that is, current population shares represented by each age-group remain unchanged.

Without ageing the projected fiscal gap would be much less, reaching 1.2 per cent of GSP by 2055-56. This suggests that ageing is a significant driver of the fiscal gap, contributing 2.2 percentage points or roughly 65 per cent. In a scenario where the population as a whole does not age, expenses, particularly in health, would be lower and revenues would be higher.

Chart 6.5 Ageing contributes to the fiscal gap by increasing health services and lowering revenues



Source: NSW Treasury

Chart 6.5 presents the key changes in the fiscal gap between the no-ageing and ageing scenarios. These are the differences between each area's contribution to the fiscal gap with, and without, ageing.

The 2.2 percentage point increase in the fiscal gap due to population ageing comes from higher growth in health expenses (+1.2 percentage points) — partially offset by lower growth in education (-0.2 percentage points) — and slower growth in revenues (+1.1 percentage points). The slower revenue growth is primarily due to lower transfer duty, land tax and payroll tax revenues. Housing price and payroll tax growth decline with a smaller traditional working-age population share.

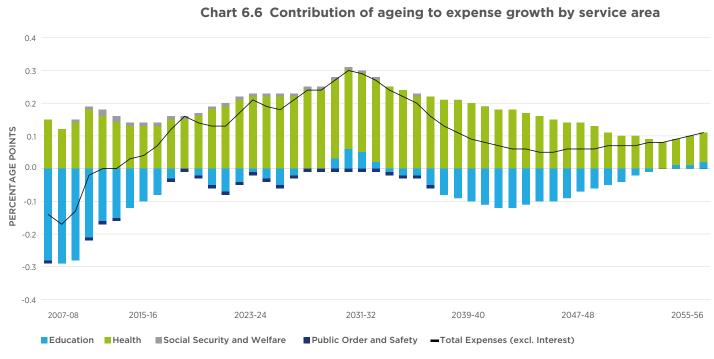
6.5 The impact of ageing over time

Chart 6.6 shows the relative contributions of ageing-related expense growth from various expense categories over time. It illustrates that, on average, higher ageing-related expense pressures in health are partially offset by relatively lower pressures in education.

Net ageing expense pressures (black line in Chart 6.6) are projected to increase annual expense growth by an average of 0.2 percentage points over the next 40 years, but are uneven in their impact over time. These pressures build up over the next 16 years as the baby boomers age and will be most intense through the 2020s. Ageing pressures are expected to peak in 2029-30, around the time when an uplift in educational cost pressures will begin to ease, after which growth in ageing pressures is projected to decline to more modest levels.

An older population will increase relative demands for health services, while reducing relative demand for education.





Migrants tend to be of prime working age and increasingly educated. **Greater migration** therefore tends to reduce the aged dependency ratio, moderating health expense pressures, without imposing additional educational pressures. **Increases in migration also** tend to boost revenue, through a larger traditional working age population share and consequently higher economic growth.

Source: NSW Treasury

As discussed in Chapter Three, an older population will increase relative demands for health services, while reducing relative demand for education. To a lesser extent, social security and welfare costs will also increase as a result of ageing, as demand for services for the aged increase. Public order and safety expenses pressures will be slightly lower due to the tendency for the prison population to be skewed towards younger people.

6.6 Sensitivity analysis

Central to closing the fiscal gap is an understanding of the extent of the influence of the factors driving it. This is perhaps more important than the size of the gap, because it gives us a sense of the nature and extent of the measures required to address it. This section presents the sensitivity of the fiscal gap to key parameters including: population, housing supply, house price growth, participation, productivity, and government revenues and expenses.

In a departure from previous reports, in this sensitivity analysis improvements or deteriorations in GSP per capita growth are not directly flowed into modelled expenses. The results presented in this section therefore illustrate how sensitive the fiscal gap is to improvements in economic growth, when the connection between real income growth and demand for government services is loosened.

The policies that influence the extent to which the demand for government services is automatically linked to economic growth are discussed in Chapter Seven. Choosing to implement these policies will mean that a boost to the economy will be more effective in addressing the fiscal gap.

Population — fertility rate and migration levels

The population projections are driven by assumptions about fertility, the national level of net overseas migration (NOM) and life expectancy. The central scenario assumes 1.95 births per female, 215,000 inward migrants to Australia a year, and life expectancy of 88.6 years for males and 91.4 years for females by 2056.

Table 6.1 presents the projected fiscal gap if the fertility rate and Australian NOM assumptions are altered. Life expectancy is not tested in this sensitivity analysis because, unlike migration and fertility, life expectancies can be projected more accurately; do not have a large impact on the results; and are not as directly influenced by government policy decisions as fertility and migration.

Table 6.1 Impact of fertility and net overseas migration on the fiscal gap

	Fertility rate (births per female)					
		1.65	1.80	1.95	2.10	2.25
Annual Australian Net Overseas Migration ('000)	190	3.7	3.6	3.6	3.6	3.5
	215	3.4	3.4	3.4	3.3	3.3
	240	3.2	3.2	3.1	3.1	3.0

Source: NSW Treasury

The fiscal gap only changes modestly when the fertility rate changes. This is because while higher fertility will increase the share of younger people and therefore ameliorate ageing; relatively higher education expenses partially offset health savings.

The fiscal gap is, however, more sensitive to changes in the Australian NOM. The fiscal gap improves by 0.1 percentage points for every 25,000 additional migrants to Australia a year, of which New South Wales would receive an average of around 7,000. Increased migration reduces the fiscal gap because it ameliorates population ageing and therefore increases participation.

Migrants tend to be of prime working age and increasingly educated. Greater migration therefore tends to reduce the aged dependency ratio, moderating health expense pressures, without imposing additional educational pressures. Increases in migration also tend to boost revenue, through a larger traditional working age population share and consequently higher economic growth.

Housing supply

While the level of Australian NOM is largely a policy decision of the Commonwealth Government, the NSW Government can influence the state NOM share and NSW net interstate migration (NIM) in indirect ways. These include providing services and infrastructure to enable a larger housing supply, and therefore a larger population.

In Chapter Four we set out the relationships between housing supply, infrastructure and population. House prices and job opportunities are key determinants of a migrant's decision about where they will live. Table 6.2 below summarises the modelled demographic, economic and fiscal impacts of increased housing.

Table 6.2 Projected outcomes under different housing supply scenarios

	Average Annual New Dwelling Construction				
	53,500	48,500	43,500	38,500	33,500
Fiscal gap (per cent of GSP)	3.2	3.3	3.4	3.5	3.6
Aged Dependency Ratio (at 2055-56)	39.0	40.3	41.6	43.1	44.8
Compound annual average growth rate (2014-15 to 2055-56):					
- NSW population	1.1	1.1	1.0	0.9	0.8
- Traditional working age population (ages 15-64)	0.9	0.8	0.7	0.6	0.4

Source: NSW Treasury

The construction of 43,500 new dwellings in New South Wales each year over the next 40 years is consistent with current policy. Table 6.2 shows that an increase in the housing supply of 10,000 a year increases annual growth in both population and traditional working age population by 0.1 and 0.2 percentage points respectively. This translates to an increase in total population of around 834,000 people by 2056 and a reduction in the aged dependency ratio of 2.6 percentage points. This would result in an improvement in the fiscal gap of around 0.2 percentage points.

The sensitivity results suggest that even if the increase in housing supply was halved to an additional 5,000 per annum, the improvements would still be significant.



An increase in the housing supply of 10,000 a year increases annual growth in both population and traditional working age population by 0.1 and 0.2 percentage points respectively.



Participation rate

The participation rate drives labour force growth and hours worked and therefore the economy's output. Changes in the participation rate therefore impact on the fiscal gap. Table 6.3 lays out the degree of those sensitivities.

Table 6.3 Sensitivity of the fiscal gap to the participation rate

	Participation rate by 2055-56 (per cent)				
	55.5	57.5	59.5	61.5	63.5
Fiscal gap (per cent of GSP)	4.1	3.8	3.4	3.0	2.7

Source: NSW Treasury

Table 6.3 shows that, for every 2.0 percentage point improvement in participation over the years to 2055-56, the fiscal gap falls by around 0.3 percentage points. This result confirms that policies aimed at encouraging participation are an important element in addressing the fiscal challenge.

Productivity growth

Labour productivity is the principal driver of GSP, real income and living standards. Sensitivities around the underlying productivity growth assumption are set out in Table 6.4. If the annual productivity growth rate increases by 0.2 percentage points a year, the fiscal gap declines by around 1.0 percentage points.

Table 6.4 Sensitivity of the fiscal gap to productivity growth

	NSW annual productivity growth rate (per cent)				
	1.1	1.3	1.5	1.7	1.9
Fiscal gap (per cent of GSP)	5.4	4.4	3.4	2.4	1.6

Source: NSW Treasury

Government productivity and efficiency

Table 6.5 shows the sensitivity of the fiscal gap to changes in government productivity. This assumes improved efficiency will commensurately reduce expense growth, while maintaining services.

If government productivity growth increased by 0.2 percentage points a year, this would reduce the fiscal gap by 1.4 percentage points. An increase of just over 0.5 percentage points in government productivity per year would close the fiscal gap.

Table 6.5 Sensitivity of the fiscal gap to government productivity

	Percentage point change in service delivery efficiency (government productivity)					
	-0.4	-0.2	0.0	0.2	0.4	
Fiscal gap (per cent of GSP)	6.6	4.9	3.4	2.0	0.7	

Source: NSW Treasury

Such a result is indicative of the significance of productivity in the public sector and highlights the importance of policies aimed at improving service delivery efficiency, outlined in Chapter Seven.

Revenue growth

The fiscal gap emerges because projected annual revenue growth rate of 4.7 per cent is lower than the projected annual expenditure growth rate of 5.3 per cent. Table 6.6 shows how changes in the average annual revenue growth will affect the fiscal gap, if expenditure growth is kept constant at 5.3 per cent.

Table 6.6 Sensitivity of the fiscal gap to the average annual rate of revenue growth

	Percentage point change in average revenue growth 2014-15 to 2055-56					
	-0.2	-0.1	0.0	0.1	0.2	
Fiscal gap (per cent of GSP)	4.4	3.9	3.4	2.9	2.3	

Source: NSW Treasury