B. FISCAL RISKS AND BUDGET SENSITIVITIES

The 2018-19 Budget is prepared, in part, on forecasts and assumptions that are subject to variation. This appendix identifies the risks inherent in the budget and presents the budget result impact and/or balance sheet impacts of various sensitivities as a result of changes in select variables. Each sensitivity estimate adopts the same forecasts and assumptions used in preparing this Budget, for all variables other than that being tested.

The summary of key sensitivities should be used as a 'rule of thumb' estimated impact from a change in the variable presented. The sensitivities assume either a 1 per cent change or 1 percentage point change to the relevant factor each year as specified. A positive impact from the factor change improves the State's budget result or net worth, whereas a negative impact from the factor change weakens the State's budget result or net worth.

This appendix also contains a list of specific fiscal risks to the State. The development of these risks have the potential to affect the State's budget and forward estimates. The potential impacts have not been included in the budget aggregates due to uncertainty in magnitude or timing. For further information on the State's contingent assets and liabilities see Appendix C of this Budget Paper.

Operating Statement risks and sensitivities

State taxation revenue

The NSW Government collects taxation revenue from a range of sources, including transfer duty on property transactions, motor vehicle tax, payroll tax, land tax, gambling taxes and other duties and levies. The amount of revenue that these taxes generate each year is dependent on underlying economic drivers such as property transaction volumes and prices, employment growth, compensation of employees, and consumption growth. Changes in these underlying drivers can have a significant impact on the actual revenue collected.

Table B.1: Revenue sensitivities – state taxation revenues

Revenue source and assumptions	2018-19 Budget	2019-20	2020-21 Forward estimates	2021-22	2018-19 Sensitivities
	$m	$m	$m	$m	
State tax revenues					
Factors affecting state tax revenues					**+ 1% movement in factor(a)**
Dwelling sales growth	62	69	73	77	
Change in employment growth	103	108	113	118	
Change in growth of compensation of employees	100	106	111	116	

(a) 1 per cent movement in factor is a 1 percentage point increase.

Transfer duty is a highly volatile revenue source, reflecting the underlying volatility of property transactions and prices. Property transaction volumes are particularly volatile, and have historically varied by up to 35 per cent from one year to the next. Interacting with property price variations, transfer duty revenue has historically grown by as much as plus or minus 45 per cent from one year to the next. The growth of land tax is affected by movements in land values, as well as changes in the number of land owners whose land holdings exceed the land tax threshold.

Other state taxes are typically less volatile, following changes in the broader NSW economy. Payroll tax is particularly sensitive to changes in employment, wages and changes to the industrial composition of the economy. Motor vehicle taxes, gambling taxes and other stamp duties broadly follow consumption patterns across New South Wales, which can change suddenly, influenced by numerous factors including employment and house price growth.

Commonwealth grants and GST revenue

The Commonwealth Government provides grants to New South Wales in the form of GST, National Agreement and National Partnership payments.

GST revenue received by New South Wales is dependent on the amount of GST revenue collected nationally (the pool size), the State's per capita share of this revenue (its relativity) and its population size. The 2018-19 Commonwealth Budget forecast a significant increase in the GST pool over the four-year period to 2021-22, based on forecast national consumption growth and increased compliance activities. Reductions in the size of the GST pool is a risk to State revenue. A change in New South Wales relativity is a further risk to revenue. A fall in transfer duty revenues in other states could place further downward pressure on the New South Wales relativity and GST distribution.

Table B.2: Revenue sensitivities – GST

Revenue source and assumptions	2018-19 Budget	2019-20 Forward estimates	2020-21	2021-22	2018-19 Sensitivities
	$m	$m	$m	$m	
Good and Services Tax Revenue (b)					
Factors affecting NSW GST revenue					
NSW population	133	138	146	153	**+ 1% movement in factor** (a)
GST pool size (c)	184	188	197	205	
NSW relativity (c)	...	188	197	205	

(a) 1 per cent movement in factor is a whole 1 per cent increase (not a 1 percentage point increase).
(b) The GST pool is currently estimated at $62.3 billion in 2017-18. The NSW adjusted population share (population share multiplied by relativity) is estimated to be 28.2 per cent in 2017-18. State GST relativities for 2018-19 have been determined by the Commonwealth Treasurer and will not change, so no sensitivity is calculated.
(c) The impacts of a 1 per cent change in the GST pool size and NSW relativity are the same because of the nature of the GST formula (population share multiplied by relativity multiplied by pool size equals NSW GST revenue). Note this does not hold for NSW population as this is calculated as a 1 per cent increase in NSW population, not a 1 per cent increase in the NSW population share.

If New South Wales' population share increases as a proportion of national population, GST revenue will increase. At the same time the cost of services also increase as more people place a greater demand on government services. An increase in the total GST pool or NSW relativity will increase the GST revenue New South Wales receives.

The budget result is also impacted by variations in National Agreement and National Partnership payments, however, due to the volatility of this funding it is difficult to forecast budget sensitivity. The volatility arises from new or re-negotiated programs and infrastructure projects, the termination of existing agreements and changes to payment profiles.

Royalties

Mineral royalties in New South Wales are primarily derived from coal, most of which is exported to East Asia, with a small quantity of gold and other minerals making a small contribution each year. Mining royalties are most sensitive to changes in foreign exchange rates, global coal prices and domestic production, but are exposed to numerous domestic and global risks that contribute to their historical volatility as a revenue source.

Mineral royalties are exposed to changes in foreign exchange rates due to coal exports being transacted in US dollars. An appreciation in the Australian dollar reduces the revenue received by the NSW Government, and can have secondary impacts on production and investment decisions in the sector.

Coal export price fluctuations are another major source of risk to mineral royalties and have historically been subject to rapid short-term volatility. Supply shocks, changes to export restrictions or alterations to investment in major coal-producing countries can rapidly inflate or reduce prices. Coal demand is equally susceptible to shocks, with the energy mix of coal-importing countries, weather conditions in the northern hemisphere and the relative costs of alternative fuel sources potentially impacting prices and royalty collections.

Coal export volumes are a less severe, but still significant, risk to royalty revenues. Capacity constraints and weather conditions can adversely affect rail and port operations, which can in turn slow coal exports unexpectedly.

Table B.3: Revenue sensitivities – royalties

Revenue source and assumptions	2018-19 Budget	2019-20 Forward estimates	2020-21	2021-22	2018-19 Sensitivities
	$m	$m	$m	$m	
Royalties [b]					
Factors affecting NSW Royalties					
Coal export volumes (Mt)	17	16	16	15	**+ 1% movement in factor** [a]
Coal export prices ($US)	18	18	18	17	
Australian-US dollar exchange rate	(18)	(17)	(17)	(16)	

(a) 1 per cent movement in factor is a whole 1 per cent increase (not a 1 percentage point increase).
(b) Royalty sensitivities do not include changes to non-coal revenue or to the composition of coal types.

General expense risks

Employee-related expenses represent the budget's largest operating expense. This consists of wages, salaries, superannuation expenses and employment on-costs. The size of the workforce, new enterprise bargaining agreements and discount rates are important drivers of employee-related expenses. Any changes in these parameters could have a significant impact on the budget result. Since 2011, this risk has been managed through the NSW public sector wages policy.

To enable the provision of government services to citizens, the government purchases goods and delivers services. Employee costs are a key driver of the cost of these services. Actual growth in demand for government services may exceed projections, which presents a further risk to employee-related expenses.

The State also incurs other operating expenses, relating to the non-labour costs of delivering services to customers across New South Wales. These include repair, maintenance and the depreciation of assets, and general operating costs such as electricity, insurance, ICT, fuel, communications and water, which are subject to market fluctuations.

Changes to inflation such as consumer price indexation, wage price index, or other market fluctuations can impact the budget. Higher inflation increases the cost of goods and services expenditure, which outweighs the positive budget impact of increases in taxes and own-source revenue. The aggregate impact is predicted to worsen the budget result.

The cost of maintaining the State's assets would also change if there were substantial changes in the size and growth of the State's asset base. Expenses could also be impacted if the assets' useful lives or level of depreciation were to materially change.

Table B.4: Expense sensitivities

Expense source and assumptions	2018-19 Budget	2019-20 Forward estimates	2020-21	2021-22	2018-19 Sensitivities
	$m	$m	$m	$m	
Expenses					
Factors affecting expenses					+ 1% movement in factor [(a)]
Employee expenses (excl super)	(316)	(334)	(345)	(355)	
Cost of goods and services	(216)	(211)	(212)	(225)	
Government services demand growth					
Factors affecting expenses					+ 1% movement in factor [(a)]
Health and Education expenses	(387)	(401)	(418)	(434)	

(a) 1 per cent movement in factor is a whole 1 per cent increase (not a 1 percentage point increase).

Health and education make up a large proportion of public sector expenditure. An increase in demand for these services will worsen the budget result. Likewise, a decrease in Commonwealth Government contributions to health and education services will worsen the budget result, if the level of service is maintained.

Increasing demand for public transport services also has implications for the budget result. The current 12 month rolling average for transport patronage growth is over 5 per cent, exceeding population growth. The NSW Government is providing more rail services through the More Trains, More Services program and further investments in this Budget for more regional and metropolitan bus services.

Investment revenue and borrowing costs

The budget is susceptible to the performance of global financial markets and changes in interest rates. Investment returns above/below those estimated will have a positive/negative impact on revenues. Higher interest rates may result in higher borrowing costs for new borrowings, but also provide higher interest revenue and higher investment distributions.

Table B.5: Financial markets and interest rates sensitivities

Expense / Revenue source and assumptions	2018-19 Budget	2019-20 Forward estimates	2020-21	2021-22	2018-19 Sensitivities
	$m	$m	$m	$m	
Financial markets and interest rates					
Investment Revenue [(a)]	199	201	165	134	+ 1% movement in factor
Interest Revenue [(b)]	12	11	10	11	
Interest Expenses [(b)]	(3)	(25)	(65)	(163)	

(a) 1 per cent movement in factor is a 1 percentage point increase in investment returns.
(b) 1 per cent movement in factor is a 1 percentage point increase in interest rates.

Treasury continues to develop financial risk management strategies that optimise and protect the State's balance sheet. For example, this year Treasury and TCorp have worked closely to assist agencies with the management of foreign exchange risk for business as usual and significant projects in these volatile markets. This approach results in greater cost certainty and cost-efficient arrangements for managing foreign exchange risk. This approach will continue to be applied in the future to provide cost effective and consistent management of foreign exchange, interest rate and commodity price risks.

Balance Sheet risks and sensitivities

Investments

The NSW Infrastructure Future Fund (NIFF)

The NIFF continues to deliver steady returns for the State. TCorp manages the NIFF to achieve long-term investment returns that are superior to fixed term deposits or cash.

Since its inception in December 2016, the NIFF has achieved investment gains of over $1 billion, representing a net return of 6.43 per cent per annum as at 30 April 2018. This investment return is well above the rate available from holding funds in the Treasury Banking System. The balance of the NIFF stands at $19.2 billion as at 30 April 2018, which comprises proceeds from asset recycling transactions, Commonwealth Government Asset Recycling Initiative payments, proceeds from Waratah Bonds, windfall tax revenue, and investment earnings.

The NIFF is invested strategically in a mix of defensive and growth assets. This asset allocation is designed to provide liquidity to fund the future requirements of the Restart NSW and Rebuilding NSW expenditure programs, stable income as well as exposure to higher yielding assets.

Social and Affordable Housing Fund (SAHF)

The SAHF was seeded with $1.1 billion of asset recycling proceeds in August 2017. In the eight months since its inception, the SAHF has returned 7.02 per cent, outperforming the strategic asset allocation benchmark and increasing funding for new and affordable housing stock.

TCorp manages the SAHF to provide a stable income stream for up to 25 years, facilitating the delivery and on-going servicing of 2,200 social and affordable homes from a mix of private and non-profit consortia.

Superannuation and long service leave liabilities

Liabilities for superannuation and long service leave are forecast based on a wide range of parameters. These include assumptions around salary growth, inflation, investment returns and discount rates. A change in any of these parameters may affect the actual liabilities of superannuation and long service leave. The long service leave liability is also subject to variations in the rate of employee retention.

Table B.6: Superannuation liabilities

Net financial liabilities (NFL) source and assumptions	2018-19 Budget	2019-20 Forward estimates	2020-21	2021-22	2018-19 Sensitivities
	$m	$m	$m	$m	
Superannuation liabilities [b]					
Factors affecting superannuation liabilities					**+ 1% movement in factor** [a]
Change in public sector wages and salaries	(140)	(260)	(360)	(450)	
Change in Sydney CPI	(640)	(1,250)	(1,850)	(2,600)	
Change in investment return [c]	355	730	1,120	1,540	
Change in discount rate [d]	8,300	...	...	...	
Factors affecting superannuation liabilities					**- 1% movement in factor** [a]
Change in public sector wages and salaries	140	260	350	430	
Change in Sydney CPI	640	1,340	1,930	2,740	
Change in investment return [c]	(355)	(720)	(1,100)	(1,490)	
Change in discount rate [d]	(9,400)	...	...	...	

(a) 1 per cent movement in factor is a 1 percentage point increase.
(b) For producing superannuation liabilities sensitivities, AASB 119 *Employee Benefits* is used.
(c) A positive effect (e.g. improved investment returns) reduces NFL (improves the financial position), while a negative effect (e.g. higher public sector wages) increases NFL (weakens the financial position).
(d) Effect of a 1 percentage point increase/decrease in the indicated factor (discount rate, interest rate or rate of return).

An increase in public sector wages and salaries will increase superannuation entitlements of those employees on a defined benefits scheme still in the workforce, while an increase in CPI will increase the benefit payments to retired beneficiaries as their pension is indexed by the Sydney CPI. An increase in the investment return on superannuation assets will increase the proportion of the defined benefit that can be funded and will hence improve the budget result. For an explanation of the unfunded superannuation liability, refer to Chapter 7 of this *Budget Statement*.

Specific fiscal risks

Commonwealth related risks

Federal financial relations

The Commonwealth Government is making increasing use of legislative mechanisms as a way to establish National Agreements and National Partnership Agreements that impose stringent conditions upon New South Wales. Legislation is being used to secure long-standing federal funding (formerly delivered as Specific Purpose Payments) and used to support the ongoing delivery of public services. This trend presents real risks to the budgetary autonomy of the New South Wales Government whilst limiting the flexibility needed to deliver high quality services where they are most needed. Funding certainty is also exposed to increased risk. The Government continues to work closely with the Commonwealth and other states and territories to secure sustainable federal financial arrangements.

National schools funding

On 23 June 2017, the Australian Parliament passed amendments to the *Australian Education Act 2013* (Cth). These amendments change national school funding arrangements for Australian schools. The NSW Government has entered into an interim agreement to support Commonwealth Government funding flowing to New South Wales schools in 2018. Multilateral and bilateral negotiations around national school funding arrangements beyond 2018 are ongoing and may impact State expenditure on schools in the medium term.

National Disability Insurance Scheme

New South Wales will transition to the full scheme NDIS from 1 July 2018, and its contribution exceeds $3.0 billion in 2018-19 indexed at 4 per cent each year. Under the full scheme NDIS Agreement, the Commonwealth Government will pay the balance of all NDIS costs above the New South Wales contribution.

National Redress Scheme for survivors of institutional child sexual abuse

On 9 March 2018, the NSW Government announced it would opt-in to the National Redress Scheme for survivors of institutional child sexual abuse. Liabilities for the National Redress Scheme are forecast based on a wide range of parameters. These include assumptions about the exposure and latency of reporting abuse in New South Wales, and the number of applicants. A change in any of these parameters may affect the actual liabilities and expenses of redress over the ten-year life of the Scheme.

Infrastructure related risks

Infrastructure projects

This year's Budget includes a total estimated infrastructure program of $87.2 billion including $65.7 billion for general government agencies over the budget and forward estimates period. These estimates may vary as projects progress through the development, planning, procurement and delivery stages. The four-year capital program will also be impacted by the sale of a 51 per cent stake in Sydney Motorway Corporation to help fund the WestConnex M4-M5 Link. The transaction is progressing as planned and is expected to be completed by mid-2018. As a result, the WestConnex project may be de-consolidated from the State's accounts, once the sale occurs.

Restart NSW

This Budget includes the estimated impact of future Restart NSW reservations and commitments to government agencies (which impact capital expenditure) and non-government proponents, principally local councils (which impact on expenses). These estimates include assumptions about the spending profile of approved projects and of potential future projects that have not yet been approved (with an assumption made as to when formal approvals will be made). This has been informed by the previous experience with Restart NSW projects.

Changes to timing of these approvals and project delivery may affect the estimates. Unreserved balances in Restart NSW are not reflected in the budget until a reservation or commitment is made. See Chapter 2 of the *Infrastructure Statement* for more information.

Snowy Hydro Legacy Fund

In March 2018, the NSW Government sold its 58 per cent shareholding in Snowy Hydro Limited to the Commonwealth Government, enabling $4.2 billion to be spent on infrastructure in regional and rural New South Wales. To facilitate this, the NSW Government will implement the Snowy Hydro Legacy Fund. Spending on projects attributed to the Fund will affect the budget estimates as projects are approved by Government. The 2018-19 Budget includes $40.0 million for investigative studies.

Maintenance and depreciation from NSW's infrastructure program

The Government's infrastructure investment program has supported growth in the State's asset base. The larger asset base, which also reflect asset revaluations, will have flow-on effects to depreciation and maintenance expenses when assets are completed, many beyond the forward estimates. Between 2011-12 and 2017-18, the compound annual growth rate of depreciation was 8.9 per cent, compared to 4.3 per cent for total expenses. Over the four years to 2021-22, depreciation is projected to grow at an average rate of 3.8 per cent, compared to 3.2 per cent for total expenses. This risk associated with maintenance costs is partially contained by the Government's use of Public Private Partnerships in its infrastructure program, which allow for risks relating to maintenance costs to be passed on to private sector contractors.

Government will continue to develop and implement appropriate policies and reforms to sustainably manage its maintenance and depreciation expenses, and their impact on the budget result.

Financial reporting and accounting related risks

Changes to Accounting Standards

The Australian Accounting Standards Board has issued several new Australian Accounting Standards (AAS) that apply from 2019-20, and are likely to have significant impacts on the State's financial statements. The major new AAS are AASB 15 *Revenue from Contracts with Customers*, AASB 1058 *Income of Not-for-Profits*, AASB 16 *Leases* and AASB 1059 *Service Concession Arrangements: Grantors*.

The new AAS introduce changes including requiring most leases to be reported on the balance sheet, potential changes to the timing in the recognition of some revenue, and recognition of service concession assets and related liabilities at the commencement of service concession arrangements. The new AAS are expected to significantly increase assets and liabilities in the State's balance sheet, and are also likely to impact the budget result. The NSW Government is currently assessing the effects of applying these new accounting standards on the forward estimates and is not yet able to reliably quantify the impact.

Transactions

In accordance with standard NSW budgeting practice, the State does not reflect the impact of major asset transactions until they are finalised. This enables the government to better manage the various risks and uncertainties associated with such transactions and minimise its interference with competitive tender processes.