Independent Modelling of Federal Budget 2018-19

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HOW DOES THE BUDGET AFFECT US?

On Tuesday 8 May 2018, the Australian Federal Government unveiled its budget proposal and associated vision for policy priorities.

NATSEM independently modelled some selected budget measures, including the multi-step tax reform, reverted medicare levy increase and more. This brochure briefly reports some of our findings.

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Federal Budget 2018: Continuing the Populist Turn

The 2018 Federal Budget has been launched at a time of greater economic certainty largely due to an improving global outlook and a sharp rise in revenue. Over the next four years, the budget predicts an average growth in revenue of 6.2%. To put this into historical perspective; that is almost double the average revenue growth experienced by the Labour governments of Kevin Rudd and Julia Gillard and the Abbott government. It is noteworthy that Treasury did not predict this spectacular turn in fortune just five months ago when it conducted the mid-year economic and fiscal outlook (Myefo). Political scientists and commentators all over Australia will question why economists continue to get these forecasts so wrong. Budgets provide the evidence-base to inform the key decisions of government. They frame the nature of the public policy agenda, and scope what is possible in policy terms. Poor forecasting diminishes the quality of economic decision-making.

So where has the revenue come from? The largest contribution comes from income tax due to employment growth and higher than expected prices for commodities. In addition, company tax is anticipated to grow by $15 billion over the year; an increase of 22%. Personal income tax is also expected to increase by 6.3% over the next four years despite tax cuts and wage growth is expected to rise to 3.5% by June 2021.

However, the 2018 Federal Budget has also proved wholly predictable in the sense that the Treasurer continued with the populist turn established in the last budget in the run-up to the next federal election. Sweeteners have been provided to Middle Australia with an increase in the low income tax offset; although the real number of people who will benefit is difficult to ascertain and the biggest cuts will occur with the movement to a flat tax in July 2022. Moreover, strategic investment in public transport projects, home care and pensions could help the government consolidate its voter base.

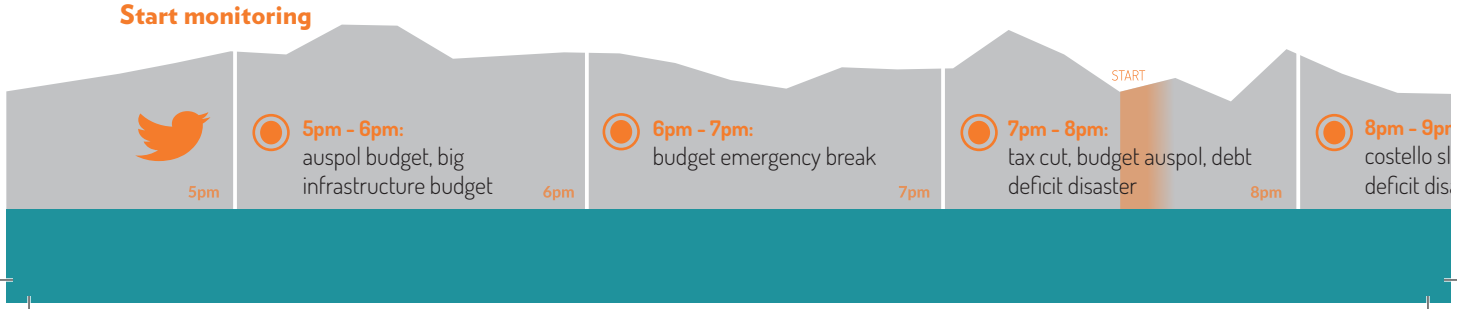
In short, battlelines between government and opposition have now been clearly drawn for the next election with Bill Shorten sure to focus on the inequity of Australians earning between $41,000 and $200,000 being taxed at the same rate of just 32%. Moreover, the move towards a flat tax will inevitably be a painful process and is likely to attract significant critical attention in the coming months.

Fiscal Outlook

The total revenue in FY 2018-19 is expected to be $486 billion, which is about 23.1% of the total GDP in Australia. With revenue being lower than expenses, the government expects a net operating deficit estimated at $2.4 billion in 2018-19. The social security and welfare, health, defence and education functions account for nearly two-thirds of the total expenses, with social security and welfare ($176 billion) being the largest expense in 2018-19.

Revenue:
$486 Billion (23.1% of the GDP)

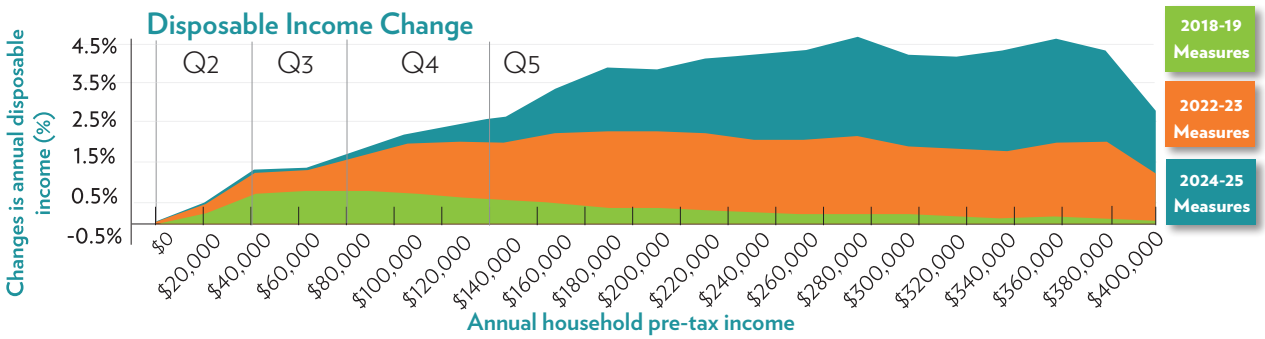
Start monitoring



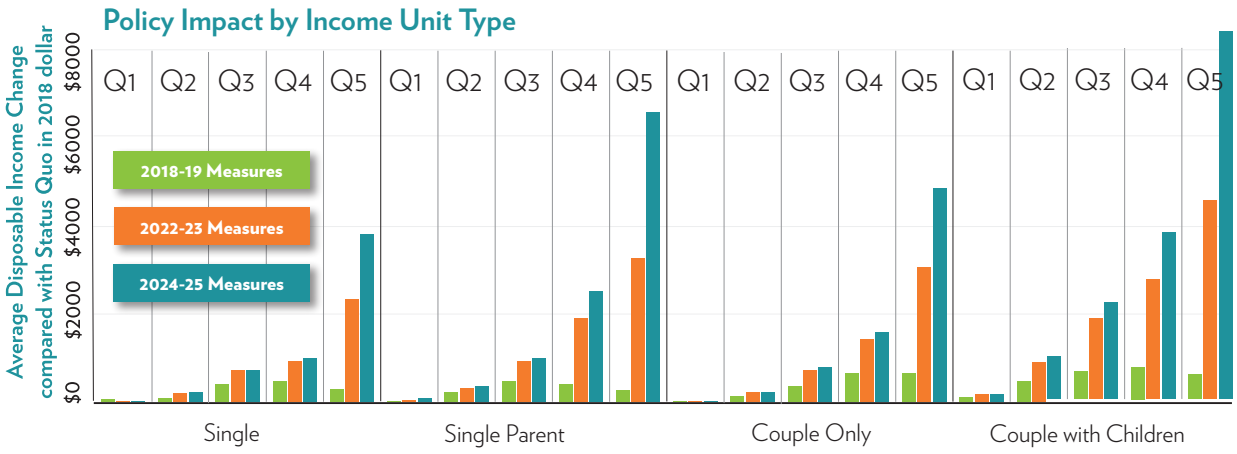
Population

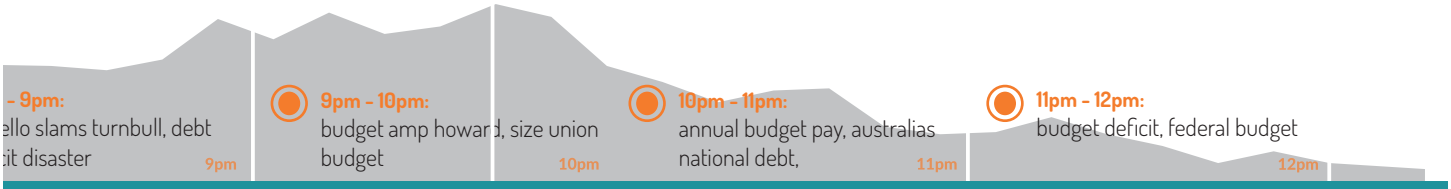
As the 2018 budget measures are planned to be implemented in multiple phases, we model the impact of the budget measures at each milestone. This includes Phase 1, 2018-19, when the *low and middle income tax offset* will be introduced and one of the tax thresholds will be adjusted. Phase 2, 2022-23, will include a change of the *low income tax offset* to replace the *low and middle income tax offset*, and further tax threshold changes will be implemented. Phase 3, 2024-25, will complete the last step of the personal income tax reform with the removal of the second highest tax bracket. Besides tax change, our modelling in all sections also includes the dropped Medicare levy change and increased pensioner work bonus as part of the proposed budget measures.

All these measures will affect people depending on their income levels and household types. This section reviews how different household types and different income levels are affected by the 2018-19 Federal Budget measures. In absolute terms, high income earners are most likely to benefit from the tax reform once it is fully implemented which will occur in stages. The measures put in place for the upcoming financial year, 2018-2019, will mostly benefit middle income earners due to the changes in tax offset criteria. Lower income earners, however, will benefit less than middle income earners as they already pay no or little tax. Couples, on average, benefit more due to the possible dual earning capacities and associated higher income levels.



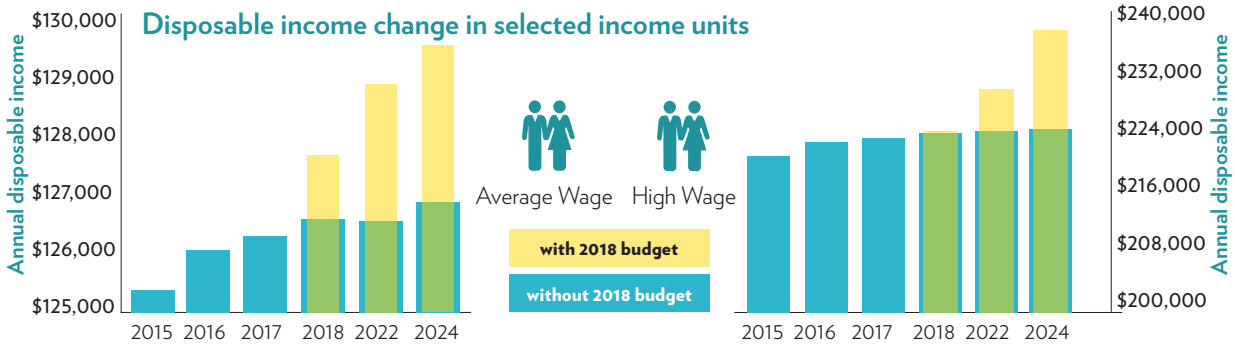
The income quintile used for the income unit type analysis is calculated using households' current equivalised disposable incomes. The disposable income change is plotted with the absolute income level, with vertical reference lines indicating the positions of total pre-tax income quintile thresholds.



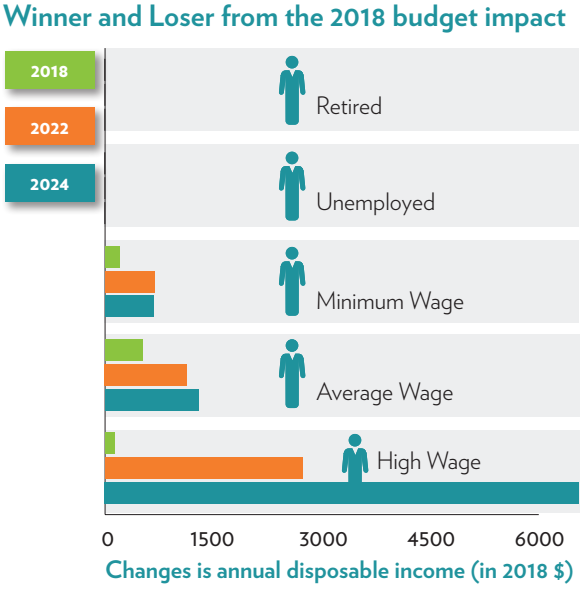


Winners and Losers

This section examines a range of most commonly observed household types in Australia and identifies who benefit the most and the least from the proposed reforms. Generally, no one would be worse off due to the budget measures focusing on tax cuts. Middle income earners benefit the most in the financial year 2018-19 thanks to the introduction of the low and middle income tax offset and an increase in tax threshold. Those earning an average full-time salary of $83,000 per year would get a maximum tax offset of $530 back in the upcoming financial year. However, in the long term, individuals with high incomes will benefit the most once the tax reform is fully implemented. For example, a couple both earning twice the average full-time salary can expect an extra $13,000 in 2024-25.

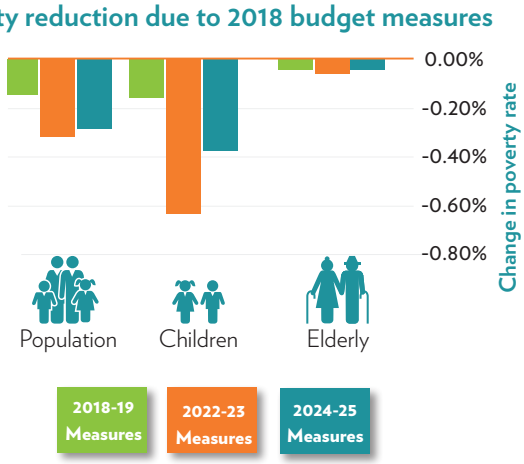


Although there are no significant losers under the 2018 budget, a segment of the population will not benefit from any of the proposed measures. This includes pensioners with no income and the unemployed. They are among the most vulnerable population in Australia. The benefit of the measures primarily depends on the taxable income. This means that for households with the same income, they may not necessarily enjoy the same level of benefit. For instance, a couple both at average wage will be better off by $1,060 in 2018-19, while a single earner household with the same income (one with high income and one unemployed) will receive tax relief of only $135.



Poverty

Despite Australia being one of the richest countries in terms of per capita income, some in the community still struggle with poverty. Using 50% of median household income as the poverty line and keeping it constant in real terms from 2018-19 onwards, we estimate the impact of this year's federal budget measures on poverty rates in 2018-19, and 2024-25 for some of the most vulnerable groups in Australia. As shown, the poverty reduction effect of the budget is relatively small, with less than one percentage point change in any of the selected groups when the measures are fully implemented. The measures seem to have the least impact on old age poverty.



Infrastructure Spend

Estimates of returns on infrastructure over a life cycle vary, but estimates of a $4 return on every dollar spent has been quoted in this year's budget papers. This means that not only is it a good financial investment for the Government, it can also provide social returns to the communities benefiting from the infrastructure.

The budget contained $20.4 Bn of new identified road and rail infrastructure (excluding already announced national initiatives and unidentified future national priorities), with the largest amount ($5 Bn) for the Melbourne airport rail link. Expenditure on roads and rail outside capital cities totalled $8 Bn, while in capital cities it was $12.4 Bn, mainly due to expenditure in Melbourne ($7.8 Bn with $5 Bn of this being the airport rail link).

A total of $12.7 Bn was committed to spending on roads, with $5 Bn on roads in capital cities and $7.6 Bn on roads outside capital cities. $7.7 Bn was committed to spending on rail, with nearly all this ($7.3 Bn) in capital cities.

Spending on rail in capital cities is a positive move in terms of reducing traffic congestion; however the majority of the rail spend of $7.7 Bn is the Melbourne-Airport rail link of $5 Bn. While this will reduce the amount of traffic going from the city to the airport, without this the spend on roads in capital cities is much higher than the spend on rail excluding the airport rail link ($5 Bn compared to $2.6 Bn). This then raises the question – do we really need more roads in our cities? Or should we be looking to fund alternatives that reduce our reliance on cars? Many European cities are now excluding cars from the central district, or at least charging for cars accessing the central district (London).

There is a commitment to improving roads outside capital cities, with $7.6 Bn committed, more than that committed to roads in capital cities. This is important for reducing road fatalities in these areas.

Figure 1:
Budgeted Road and Rail expenditure

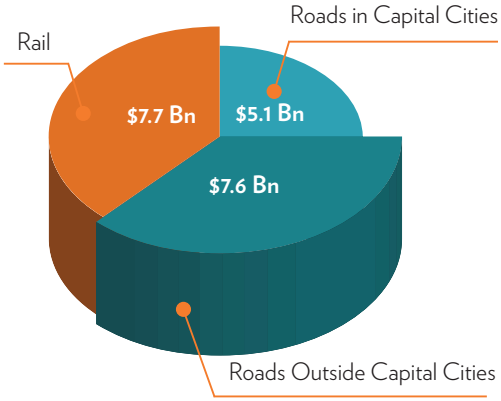


Figure 2:
Budgeted Road and Rail expenditure by Capital City/Outside Capital City

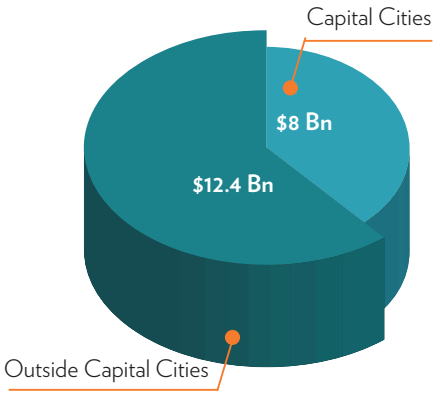
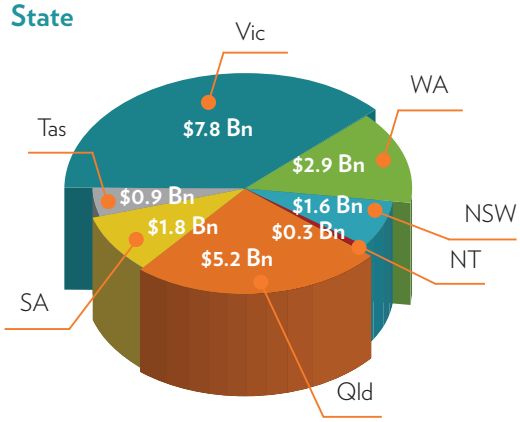


Figure 3:
Budgeted infrastructure expenditure by State



Spatial Distribution

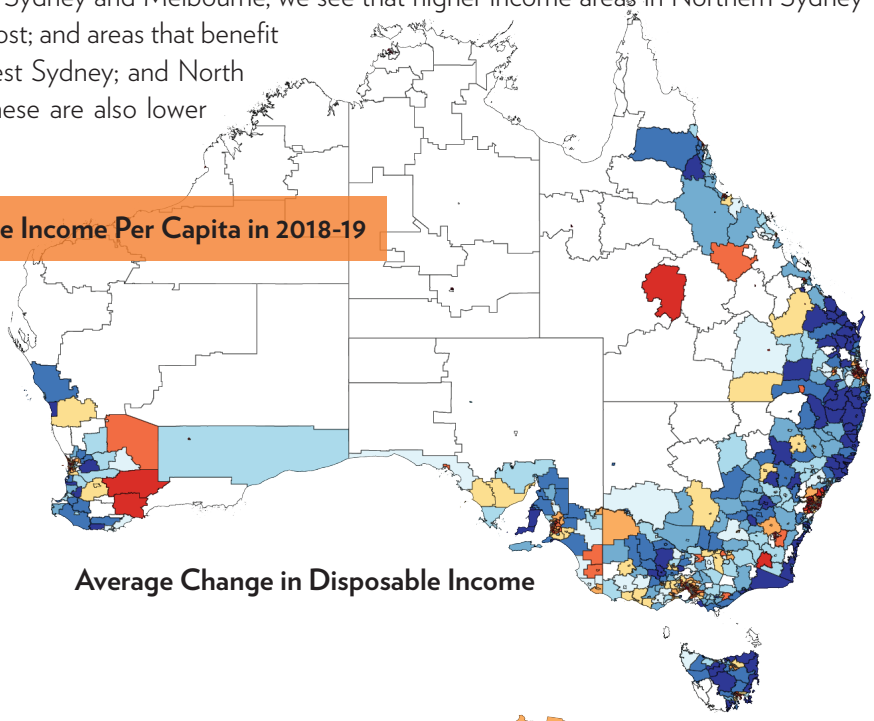
NATSEM has been able to use their innovative small area modelling technique to identify the effect of the tax and transfer changes in the 2018 budget on a suburb. This shows that for 2018-19 (stage 1 of the tax changes), the areas that gained most were around the cities, but there were also some regional areas that benefitted. Areas that benefitted least were in Northern NSW, and some areas of Tasmania, although some areas of Tasmania were also in the high gain areas. The average gain was from $66 to $268.

In Sydney and Melbourne, after Stage 1 of the tax change, there are a mix of areas with strong gains and low gains, with some North shore areas of Sydney gaining the highest amount; but some not gaining as much. This is because stage 1 of the tax changes mainly affected low and middle income earners.

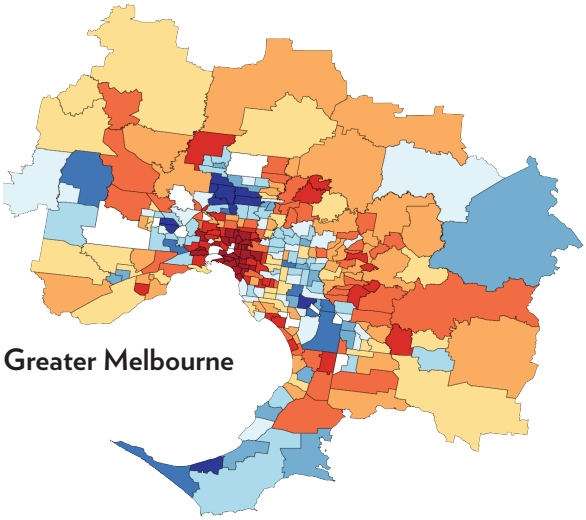
Looking at the proposed 2024-25 changes, the average amounts were much higher ($3,158 to $9,593) and across Australia the areas that benefitted the most were in cities, and areas surrounding cities. The areas benefitting least were areas on the far North coast of NSW, and areas in Tasmania, due to the lower incomes in these areas. Looking at the results for Sydney and Melbourne, we see that higher income areas in Northern Sydney and inner Melbourne benefit most; and areas that benefit the least are areas in South-West Sydney; and North and South-East Melbourne. These are also lower income areas.

Changes in Annual Disposable Income Per Capita in 2018-19

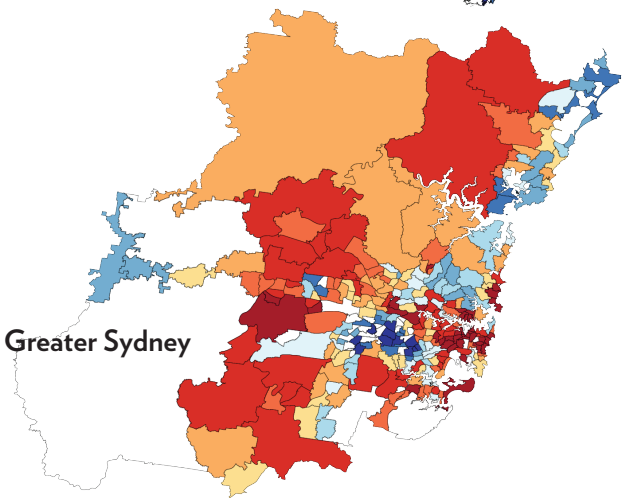
- Top 10% ($178-$268)
- 20% ($166-$178)
- 30% ($159-$166)
- 40% ($154-$159)
- 50% ($149-$154)
- 60% ($143-$149)
- 70% ($138-$143)
- 80% ($131-$138)
- 90% ($119-$131)
- Bottom 10% ($66-$119)
- No data



Average Change in Disposable Income



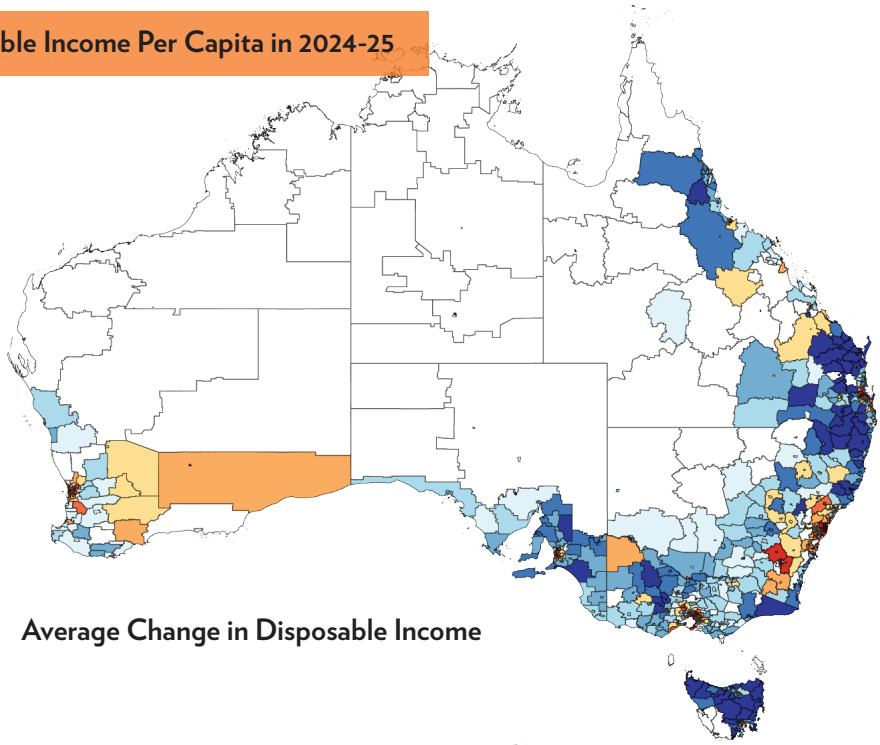
Greater Melbourne



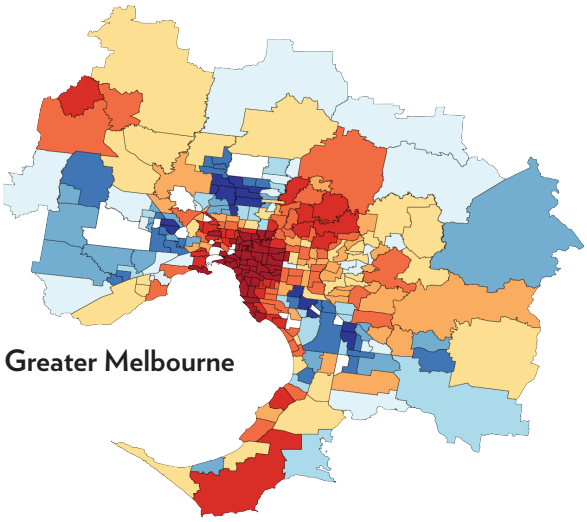
Greater Sydney

Changes in Annual Disposable Income Per Capita in 2024-25

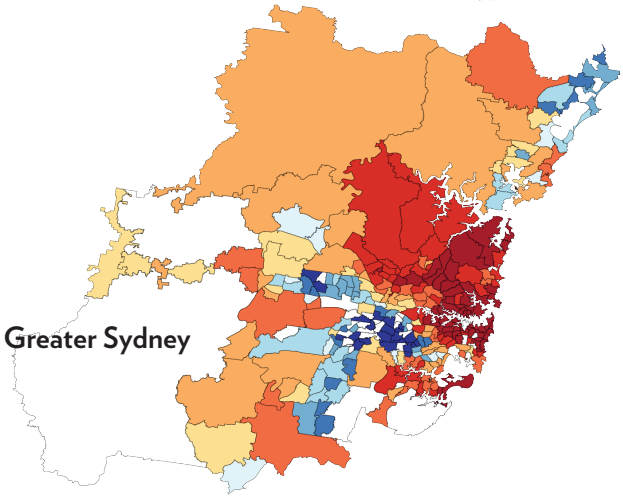
- Top 10% ($5,995-$9,593)
- 20% ($5,112-$5,995)
- 30% ($4,635-$5,112)
- 40% ($4,267-$4,635)
- 50% ($4,001-$4,267)
- 60% ($3,793-$4,001)
- 70% ($3,600-$3,793)
- 80% ($3,413-$3,600)
- 90% ($3,158-$3,413)
- Bottom 10% ($2,246-$3,158)
- No data



Average Change in Disposable Income



Greater Melbourne



Greater Sydney

PERSONALISED BUDGET IMPACT

STINMOD+ online allows anyone to enter their family details and find out what financial impact the tax and welfare measures in the budget have on the family. You may visit the link https://stinmod.canberra.edu.au/stinmod/family_impact to get a personalised budget impact assessment.

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ABOUT NATSEM AND STINMOD+

The National Centre for Social and Economic Modelling (NATSEM) at the University of Canberra is one of the premier sources of independent quantitative social and economic research services and policy advice in Australia, and one of the world's foremost centres of excellence for microsimulation, economic modelling and policy evaluation. STINMOD+ is an advanced tax microsimulation model developed by a team led by Dr Jinjing Li. The model is designed to evaluate the distributional and fiscal impact of tax and transfer policies in Australia. It covers all major taxation and welfare schemes in Australia and has a longitudinally consistent policy database from 2001 onwards, including comprehensive income and asset testing. Numbers presented are preliminary estimates which may contain sampling and non-sampling errors. NATSEM has no affiliation with any political party and received no external funding to conduct this budget analysis.

For more information about NATSEM, please visit https://natsem.canberra.edu.au/

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This brochure contains analyses from Jinjing Li, Hai Anh La, Robert Tanton, Yogi Vidyattama, Nhung Nguyen and Michael Jensen.