IPART Independent Pricing and Regulatory Tribunal | NSW

Review of the rate peg to include population growth

Final Report

September 2021

Local Government »

Tribunal Members

The Tribunal members for this review are:

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The Independent Pricing and Regulatory Tribunal (IPART)

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We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Contents

1 Our methodology allows councils' rates revenue to rise with population growth

As local communities grow, councils need to provide additional services to meet the demand of their residents and businesses. Allowing rates to keep pace with population growth enhances councils' ability to provide services and improves their financial sustainability.

In response to a request from the NSW Government we have recommended a methodology that enables councils to maintain per capita general income over time as their populations grow. Maintaining per capita general income will help councils to maintain existing service levels and provide the services their growing communities expect.

Our approach is to include a population factor in the rate peg that is calculated as the change in residential population less any increase in general revenue from supplementary valuations.

Our methodology would apply to all councils experiencing population growth, even at low levels, but not impact councils with stable or declining populations. We modelled the impact our methodology would have had on councils over the past 4 years and found it would have increased the total general income of the sector by $287 million or 1.5%. We found the benefit to councils would increase and compound over time. Our modelling is provided in Appendix D.

Our methodology will allow rates revenue to increase to better cover the costs of population growth from 2022-23. However, some councils may need to apply for special variations to catch-up on historical shortfalls in revenue.

As part of our review we released an Issues Paper, undertook targeted consultation with councils through workshops, held a public hearing and released a Draft Report. This included calling for and considering public submissions twice during the review period (after both our Issues Paper and Draft Report). Most council stakeholders supported or provided qualified support for our approach, while most ratepayer submissions raised issues of affordability.

Our broad approach is similar to our Draft Report, however in response to submissions we have updated the time period for adjusting the supplementary valuations percentage. We will also true-up the difference between the estimate of population growth with the next census data for all councils, and then true-up the difference based on a materiality threshold going forward. Our approach balances the NSW Government's commitment to protecting ratepayers from sudden or excessive rate rises, while improving the financial sustainability of local governments.

The impact of our methodology on ratepayers will also vary from council to council. Councils in NSW have autonomy to set rates and ultimately each council's ratings structure will determine who pays towards growth. While the impact on individual ratepayers may vary, on average new ratepayers will pay most of the additional rates revenue. Given this, our view is additional protections for existing ratepayers are not necessary at this stage.

We plan to review the performance of our methodology within 5 years to ensure it remains appropriate and meets its objective of compensating councils for population growth.

Monitoring implementation is essential, especially considering other reform projects impacting the local government sector. We have been asked by the NSW Government to review elements of the developer contributions system. Our advice across all reviews will balance the impact on and financial sustainability of councils and be in the long-term interests of ratepayers and the community.

Recommendation

1. Each council's general income on a per capita basis should be maintained as its population grows. The rate peg for each council should be increased by a population factor equal to the annual change in its residential population, using Australian Bureau of Statistics data, with an adjustment for income derived through supplementary valuations. Our recommended method is provided below.

1.1 Recommended adjustment to the rate peg for population growth

We recommend maintaining each council's general income on a per capita basis as its population grows as set out below

Rate peg methodology

Each year, we will determine and publish a rate peg for each council based on the following methodology:

$$Rate\ peg = change\ in\ LGCI - productivity\ factor + other\ adjustments\ + population\ factor$$

In this formula:

change in LGCI means the change in the local government cost index (LGCI).

More information on the LGCI, productivity factor and other adjustments we may make in determining the rate peg is set out in Appendix C*: The context of our review*. We have not considered other changes to the rate peg as part of this review.

Population factor for 2022–23:

Each year, each council will have a population factor equal to the annual change in its residential population, adjusted for revenue received from supplementary valuations.

The population factor is equal to the maximum of the change in residential population less the supplementary valuations percentage or zero. Councils with negative population growth will have a population factor of zero, ensuring no council would receive a lower increase in general income, relative to a rate peg calculated using the LGCI and productivity factor, under our methodology. Councils that have recovered more from supplementary valuations than is required to maintain per capita general income as their population grows will also have a population factor of zero. The population factor will be calculated using the following formula:

$$Population\ factor = \max(0, change\ in\ population - supplementary\ valuations\ percentage)$$

Change in population for 2022–23:

We will publish the change in population for each council on our website. The change in population will be calculated using the estimated residential population (ERP) for 2019 and 2020 published by the Australian Bureau of Statistics (ABS).[1] This is the most up to date ABS population data.

The calculation is shown in the following formula:

$$change\ in\ population = \max\left(0, \frac{ERP\ 2020}{ERP\ 2019} - 1\right)$$

Each year we will update the formula. For example, for the 2023-24 rate peg methodology we will calculate the change in population using ABS data for 2020 and 2021.

Supplementary valuations percentage for 2022–23:

We will publish the supplementary valuations percentage for each council on our website. The calculation is shown in the following formula:

$$supplementary\ valuations\ percentage = \max\left(0, \frac{supplementary\ valuations}{notional\ general\ income\ yield}\right)$$

In this formula:

supplementary valuations means the total value of adjustments to a council's general income for 2019-20 that the council made under paragraphs 509(2)(b) and (c) of the *Local Government Act 1993* (LG Act). This is the amount recorded as 'plus/minus adjustment' for 2019-20 in each council's 'Special schedule – Permissible income for general rates' for 2019-20 submitted to the Office of Local Government (OLG) in accordance with OLG's *Local Government Code of Accounting Practice and Financial Reporting*.[2]

notional general income yield means the general income of the council for 2019-20 prior to adjustment under paragraphs 509(2)(b) and (c) of the LG Act.

Each year we will update the formula. The supplementary valuations percentage will be calculated based on supplementary valuations revenue and notional general income yield for the same year as the ERP data.

True-up the rate peg in 2024-25 following the census and, subsequently, with a materiality threshold

We propose to provide a true-up for all councils when the next census data is released. This will impact the rate peg for 2024-25, ensuring all councils are re-based to a consistent point to reflect actual growth.

The true-up in 2024-25 would apply to all councils. For councils that would receive a lower increase in general income due to the true-up, we propose to adjust the 2024-25 population factor, but not adjust the population factor below zero. For subsequent census releases going forward we will apply a 'true-up' for councils only when the difference between the estimated residential population and actual census data is greater than 5%.

We provide more information about our true-up methodology in Appendix B: *How we recommend adjusting the rate peg for population growth*.

Explanatory notes

Important features of the methodology include:

- The population factor reflects a linear relationship between population growth and council costs.
- The change in population for each council is calculated using ABS estimated residential population data.
- Councils with negative growth will have a population factor of zero. Such councils will receive a rate peg that is determined in the same manner as it is now.
- The supplementary valuations percentage will be calculated using supplementary valuations revenue and notional general income yield for the same time period as the ERP data.
- If a council's supplementary valuations percentage exceeds its change in population, indicating the council has recovered more revenue through supplementary valuations than is necessary to maintain per capita general income, the population factor will be zero.

The methodology does not change the operation of the supplementary valuation process under the *Valuation of Land Act 1916* or the calculation of notional general income under section 509(2) of the LG Act. Councils will still calculate their notional general income in the same way as they do now. The rate peg methodology will, however, account for the value of supplementary valuations when determining the population factor to be applied.

2 Councils currently are not adequately compensated for population growth

2.1 The population in NSW is growing

The population in NSW is growing and is expected to continue to grow, but the amount of growth varies across the state.[3] Growth is concentrated in metropolitan areas, although some regional areas are also growing.[4] The NSW Government estimates the NSW population will grow from 7.7 million in 2016 to 10.6 million in 2041 with some local government areas (LGAs) expected to experience much higher growth than average.[5] Appendix C provides more information about NSW's population growth, including the impact of COVID-19. We also note the impacts of COVID-19 may affect the distribution of growth across urban and rural areas.

As local communities grow, councils need to provide infrastructure and services to new residents and businesses.

Councils source revenue in a variety of ways

Council revenue sources include:

- property rates
- sale of goods and services, which includes fees and charges for services such as waste management, water and wastewater, recreation, building approvals and parking
- grants from the Australian Government administered through the NSW Grants Commission, and other grants such as capital grants
- other revenue, including levying developer contributions
- interest income.

2.2 Council costs increase as population grows

Our analysis shows the main driver of a council's costs is the size of its population or number of ratepayers in the area.

Historically, council costs have increased with population growth. For every 1% increase in population, we estimate NSW councils' operating expenditure increases by 0.85%. **Figure 1** shows the relationship between councils' operating expenditure and population growth.

Figure 1 Population and council operating expenditure growth in NSW (1999-2019)

a. Excludes LGAs that did not exist for the entire sample period. Excludes Albury, Lithgow and Oberon, whose borders changed in 2004. Excludes The Hills Shire and Hornsby, whose borders changed in 2016.

Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, p.15.

Increased costs are driven by extra people, extra rateable and non-rateable properties, and the increase in community expectations of the functions and services councils provide.

Most submissions to our Draft Report supported the conclusions we reached in our analysis of council costs. Some submissions, such as from Regional Cities NSW and City of Sydney, suggested we should broaden the scope of costs we investigate or change the methodology to reflect underlying change in a financial variable, such as depreciation expense.[6]

We found that the impact on council costs from population growth varies depending on:

- whether the council is a metropolitan, regional or rural council
- the demographics of the population in the council area
- the type of development that occurs with population growth; that is, greenfield or infill development or an increase in secondary dwellings (such as granny flats)
- the cost mix; that is, whether there is an increase in capital or operating costs.

We found existing service levels, represented by the amount of general income per capita is the best indicator of the cost of servicing an additional person. This reflects our findings of a mostly linear relationship between costs and population growth.[7]

We worked with councils to understand how council costs and revenue are impacted by population growth:

01 **Regional issues**
We developed a case study showing the issues regional councils face. The case study was based on interviews with Byron Shire Council, Wagga Wagga City Council and Cessnock City Council; and issues raised through stakeholder submissions.

02 **Greenfield development**
We worked with Blacktown City Council to understand the costs of servicing a new greenfield development and the associated increase in revenue they receive from new development.

03 **Infill development**
We also worked with Bayside Council to understand the costs of servicing infill development. The case study also highlights issues with the ratings system.

These case studies are set out in *Appendix A: The impact of population growth on council costs and revenue.*

2.3 Funding the costs of population growth outside the rate peg

Rate pegging has been in place in NSW since 1977. The rate peg is the maximum percentage by which a council may increase its general income for the year. General income is predominantly revenue from rates. The rate peg applies to councils' total income from rates, rather than to individual rates.

Historically the rate peg has not included an adjustment for population growth, meaning the additional costs of population growth have been funded within existing rates revenue, subject to adjustment through supplementary valuations, or through other revenue sources (such as grants funding or fees for services). Stakeholder feedback as part of our review highlighted issues with the current rate pegging system that leaves growing councils without enough revenue to respond to additional demand for services.[8]

Councils may be able to increase their revenue outside the rate peg by:

Special variations	Supplementary valuations	Infrastructure contributions	Government grants
Councils can apply to IPART for a special variation to increase their general income above the rate peg	When the Valuer General issues a supplementary valuation due to changes in land value (e.g. when land is rezoned or subdivided)	Contributions from developers to fund infrastructure necessary to serve the needs of the development	Councils can apply for federal and state government grants

Councils are partly compensated for higher population growth through higher rates revenue, mainly from the supplementary valuations process.

Our analysis indicates councils are currently recovering about 60% of the costs of population growth through supplementary valuations.[9] The amount recovered varies between councils, depending on rate structure, land values and the type of development.

2.4 General income may be insufficient to service the costs of population growth

Our analysis shows the costs of growth are not being fully met for NSW councils in general, with faster growing councils tending to be unable to recover additional revenue through general income in proportion to their growth.[10]

Councils with fast growing populations have had slower growth in total revenue per capita. We expect councils experiencing high population growth will consequently observe a reduction in rates per capita as their population grows.

Submissions from councils supported our finding, indicating the costs of servicing growth outstrip the revenue that councils can recover through rates to service growth.[11] For example, in its submission to the Draft Report, Cumberland City Council identified a $28m funding shortfall for a range of council services as a result of recent population growth.[12]

We expect under-recovery of the costs of growth will mean growing councils will be unable to maintain their service levels. This may result in councils relying on special variations to fund growth or exploring other forms of revenue raising.

3 We recommend maintaining councils' general income on a per capita basis

3.1 We recommend adding a population factor to the rate peg to adjust for population growth

We examined councils' revenue and costs to investigate options to maintain councils' general income on a capita basis. The two options we considered in developing our methodology to adjust the rate peg for population growth involve either:

- **Option 1**: using the percentage change in population or rateable properties to determine the population factor, or
- **Option 2**: applying the percentage change in population or rateable properties to a per capita cost variable to determine the population factor.

These options are described in more detail in our Appendix B.

Although both options are viable, we prefer Option 1 as:

- It recognises service levels and costs are different across councils. Option 1 accounts for population growth by referring to the current costs per capita in each council.
- Our analysis found a largely linear relationship between council costs and population growth. This relationship suggests the added complexity of implementing Option 2 may be unnecessary.
- Option 2 may be difficult to implement on a council-by-council basis.

Our recommended approach is summarised in **Box 1**.

Box 1 Our recommended adjustment to the rate peg for population growth

Our recommended approach is to implement a methodology that:

- maintains total per capita general income over time
- reflects a linear relationship between population growth and council costs
- is based on the change in residential population for each council
- applies to all councils, including those experiencing low growth.

3.2 Our methodology maintains per capita general income

Our methodology has been designed to maintain per capita general income. Submissions to our Draft Report were generally supportive of our approach. However, some submissions raised concerns that our approach does not capture growth in business and other non-residential activity.[13]

Our proposed approach varies councils' total general income, not only the residential component of a council's rates. Our proposed approach implicitly acknowledges that business rates will grow over time as a population grows.

Our approach reflects our findings of:

- a mostly linear relationship between council costs and population growth
- that existing service levels, represented by the amount of general income per capita, is the best indicator of the cost of servicing an additional person.

3.3 We have used residential population rather than service population

Submissions to our Issues Paper and Draft Report highlighted the costs incurred by councils where their serviceable population is higher than their residential population. Councils may have larger service populations due to tourism or because they are employment, business or cultural hubs.[14]

For example, Bayside Council is a significant employment hub as the council's LGA contains Port Botany and Sydney Airport. The council's submission suggests its total population inclusive of workers reaches a daytime peak of approximately 251,166, or 41% higher than its residential population.[15] Similarly, City of Sydney has significant employment and tourist populations as a global city, that are not reflected in resident population numbers.[16]

We concluded it would not be appropriate to include service populations within a population factor as:

- There is some benefit to business ratepayers from a larger serviceable population. However, including population increases from service populations in the rate peg formula would burden ratepayers across all rating categories with service population-related costs.
- Where practical, councils should make use of user pays approaches to collect additional revenue from service populations.

We consider that service-population related costs are not appropriate for inclusion in the rate peg formula but recognise that these costs can be a significant burden for councils. We also recognise that councils can seek rate revenue increases to cover these costs outside of rate peg increases by coming to IPART for a special variation. We discuss the use of special variations for population related issues in section 4.3.1 of this Report.

3.4 Using ABS data to measure changes in residential population

Our view is that the ABS estimated residential population data is the best data source to measure change in population for the purposes of our methodology.

There was some support in submissions to our Issues Paper, and at council workshops, for using population projections to measure population growth.[17] However, most submissions to our Draft Report supported the use of ABS data.[18]

We found the ABS data, which is a backward-looking estimate, to be more accurate than the Department of Planning, Industry and Environment's (DPIE) population projections, reducing the need for a 'true-up' in our methodology. The ABS data is also easy to understand and publicly available.

We also considered using third party population projections but concluded this is not appropriate because the relationship between third party providers and councils is not independent. We prefer an estimate that is derived at 'arm's length' from councils' processes.

3.5 Adjusting for revenue from supplementary valuations

Councils are currently able to increase general income up to a maximum amount (called councils' notional general income) that is adjusted for supplementary valuations issued by the Valuer General. The Valuer General issues supplementary valuations when there are changes in land value outside the usual 3 to 4-year general valuation cycle (e.g. where land has been rezoned or subdivided).

Our proposed approach includes an adjustment to the population factor to account for the increase in rates revenue already obtained by councils from supplementary valuations.

Our recommended adjustment for supplementary valuations will maintain per capita general income as councils' populations grow

Without this adjustment, some councils would be overcompensated for population growth (up to double in some cases).[19]

Our analysis indicates councils are recovering about 60% of the costs of population growth from increases in general income due to supplementary valuations, although the amount recovered does vary between councils.[20]

Submissions to our Draft Report generally supported our proposed approach to adjust for supplementary valuations. Other submissions, such as from Queanbeyan-Palerang Regional Council, disagreed suggesting that subtracting supplementary valuations would not leave councils with enough additional revenue.[21]

Some submissions, including from the NSW Revenue Professionals, supported our approach, but suggested we change the timing of the calculation we presented in our Draft Report because it would be difficult to implement. In our Draft Report we proposed to use the latest available population and supplementary valuations data, noting that they applied to different time periods.[22] We agree with these submissions and have updated the methodology to align the time period over which the supplementary valuations percentage is calculated with the ABS Estimated Residential Population data.

3.6 Our methodology is forward-looking

We recognise that some councils may need additional revenue to address the impact of past population growth. The current rate pegging arrangements leave some growth councils dependent on regular special variations to ensure they have enough revenue to maintain service levels.

Feedback from stakeholders during our review was consistent with this finding, and many councils suggested they need to 'catch-up' on forgone revenue from past growth. Some councils suggested we should recommend a one-off adjustment to increase general income for high growth councils.[23]

Our recommended adjustment to the rate peg for population growth does not include an adjustment for past growth. The need for and quantum of any catch up would need to be determined on a case–by–case basis to consider each council's:

- financial sustainability
- past income from supplementary valuations
- productivity and operating environment
- impact of any special variation on ratepayers.

Our view is this assessment is best undertaken through the special variations process (see section 4.3.1). The use of the special variations process for this purpose would be most suited to councils that have experienced high population growth that has caused per capita general income to decline.

3.7 Council rating structures determine who pays for population growth

Our methodology maintains each councils' per capita general income as its population grows. While the impact on individual ratepayers may vary, in most instances, new ratepayers will pay for most of the additional rates revenue associated with population growth. Appendix B, section B.4. details the impact on ratepayers and includes worked examples. We found:

- **Who pays for population growth will vary from council to council**: The structure of a council's rates, and the type of development that occurs with population growth, ultimately determines how much new ratepayers pay.

- **Councils have limited ability to impose different rates for new ratepayers**: Generally, new ratepayers will pay the same rates as existing ratepayers in the relevant rating category or subcategory. Recent legislative changes to rating subcategories will provide some additional flexibility for councils to set rates to ensure new ratepayers pay their fair share, but only in limited circumstances. For example, within the residential category, rateable land may now be subcategorised by residential area (or part of a residential area) if a council considers this is reasonably necessary because there are significant differences between the residential areas in relation to access to or demand for, or the cost of providing, services or infrastructure. This is likely to be of most benefit for councils with greenfield developments.
- **There is no definition of 'new ratepayers'**: New additions to population can be considered 'new ratepayers'. However no clear demarcation exists as to when a 'new ratepayer' may be considered an 'existing ratepayer'.

If councils were only able to obtain revenue from new ratepayers, there would be a shortfall in revenue to meet the costs of growth. This shortfall would perpetuate the under-recovery of the costs of growth that our methodology has been designed to address. Councils would likely continue to rely on special variations to fund growth.

Existing ratepayers will also likely benefit from improvements to services and infrastructure to service population growth.

Submissions to our Draft Report discussed how council rating structures restrict councils in determining which ratepayers pay for growth. However, submissions generally supported our conclusions and analysis of who pays for population growth.

3.8 Our methodology should be reviewed within 5 years

We plan to review the performance of our proposed methodology within 5 years to ensure it remains appropriate and consistent with its intended purpose to align councils' general income with population growth. Reviewing the methodology again within 5 years will allow us to analyse its impact and make changes if necessary.

3.9 Councils' general income will change in line with population growth

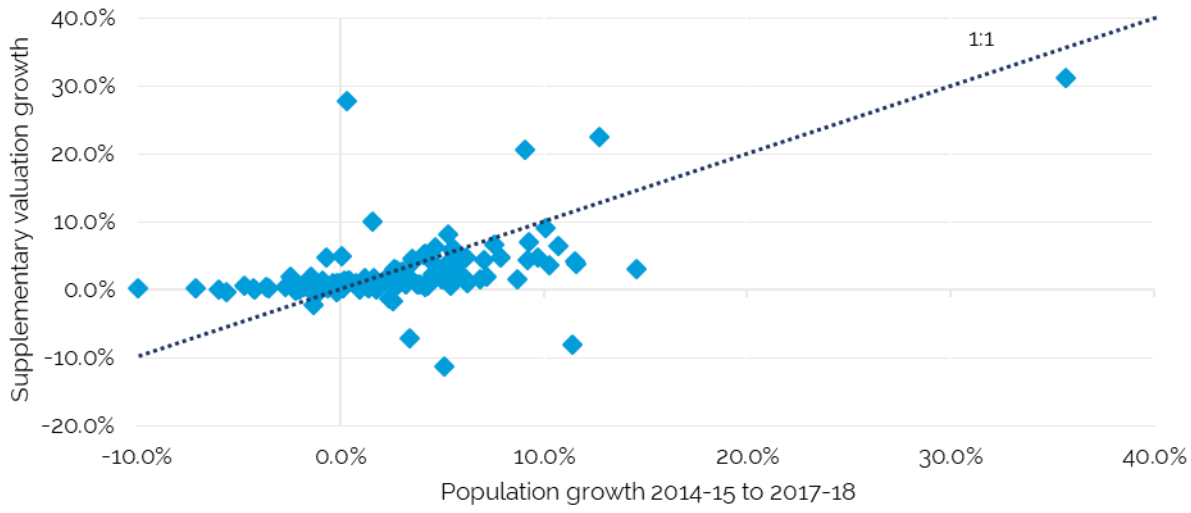
To estimate the impact on councils of our methodology to adjust the rate peg for population growth we modelled the outcomes if the recommended adjustment to the rate peg had been implemented for the past four years (2017-18 to 2020-21). We do not have reliable forecasts of the additional revenue councils receive through supplementary valuations to model the impact of our methodology going forward.

We found that our methodology would have:

- Increased the total general income of 96 of the 128 NSW councils
- increased the total general income of the local government sector by 1.5%, that is an additional $287 million.[a]

The impact of our methodology is shown in the following figures. **Figure 2** shows the percentage increase in councils' revenue per person from supplementary valuations against population growth over the past four years. **Figure 3** shows the percentage increase in councils' revenue, after adjusting for our methodology, against population growth over the past four years. Our methodology ensures councils can at least maintain general income on a per capita basis over time.

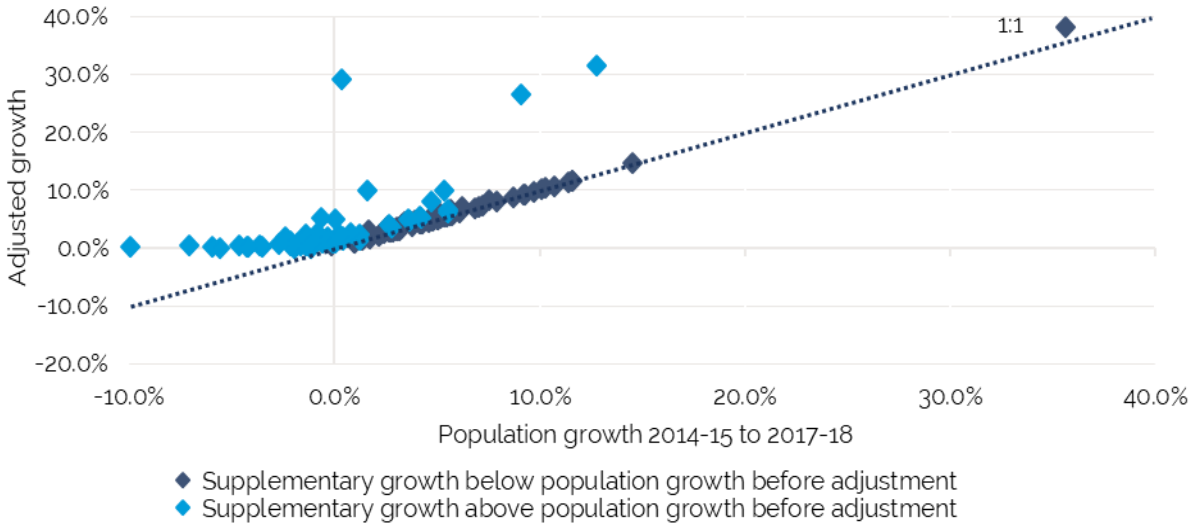
Figure 2 Percentage increase in councils' revenue per person from supplementary valuations versus population growth (2017-18 to 2020-21)



Source: OLG data and IPART analysis.

[a] Our estimate of $287 million is the cumulative increase and excludes the impact of special variations over this time period, which increased councils' general income by about $20 million over the four years.

Figure 3 Percentage increase in councils' revenue per person from adjusted growth in revenue versus population growth (2017-18 to 2020-21)



Source: OLG data and IPART analysis.

3.10 We propose to true-up with census data based on a materiality threshold

ABS population data, although backward looking, is an estimate. The data is updated to reflect actual growth after the census every 5 years. We propose to provide a true-up for all councils when the next census data is released. This will impact the rate peg for 2024-25 and ensure all councils are re-based to a consistent point where actual growth is reflected in the rate peg methodology.

We prefer this position because of the uncertainty with the ABS's population estimates due to the impact of COVID-19. We propose that this true-up is for all councils. For councils that would receive a lower increase in general income due to the true-up, we propose to adjust the 2024-25 population factor, but not adjust the population factor below zero.

Going forward after 2024-25 we would only apply a 'true-up' for councils when the difference between the estimated residential population and actual census data is greater than 5%. This approach will maintain certainty and not disadvantage councils with small populations that are more likely to experience larger deviations between estimated and actual population data.

Councils, in their submissions and at the workshops, supported a true-up mechanism in the methodology. Some councils, particularly regional and rural councils, argued existing estimates are inaccurate and under-report population growth. We discuss submissions further in section B.2.5 of Appendix B.

3.11 Our methodology applies to all councils

In our Draft Report we flagged that our standard approach may not be suitable for all councils. Our proposed methodology varies councils' total general income for the change in residential population. We considered this approach reasonable because councils usually derive most of their general income from residential rates, and we found varying just the residential component of rates may not provide councils with enough revenue over time.

As a starting point we identified councils that derive more than 50% of their rates income from non-residential sources as potentially requiring a different approach.

City of Sydney derives approximately 75% of its rates revenue from business ratepayers. Our preliminary analysis found varying its total general income as its population grows may overstate the revenue required to service this growth.[24]

We consulted with City of Sydney and undertook further analysis as part of our review and at this stage consider the same approach should apply for all councils.

The effects of rate pegging make it difficult to isolate the cost of servicing additional residential population. We recommend maintaining the standard approach for all councils and investigating the impact of our methodology over time to assess if this approach is reasonable.

Some submissions to our Draft Report suggested our standard approach could not and should not apply to all councils. For example, Blacktown and Liverpool councils argued that their situations are unique and that a different approach was required.[25]

We agree that there may be some instances where our approach may not provide enough revenue for councils, particularly for some areas that have experienced past growth. However, we maintain that our approach is suitable because it balances the need to provide additional revenue for growing communities, while protecting ratepayers from sudden or excessive rate rises without consultation.

If a council requires additional revenue, they can apply for a special variation. Our approach should minimise, but not eliminate, the need for special variations.

4 Our methodology will not address all stakeholder concerns

4.1 Changes to the statutory minimum rate amount may be needed

Councils told us they need more flexibility in setting higher minimum rates[26]

Currently, councils wishing to set minimum rates higher than the statutory minimum rate amount[27] must obtain approval from IPART. Councils with minimum rates already above the statutory minimum amount may increase minimum rates by an amount equivalent to their rate peg percentage or special variation percentage.

The statutory minimum rate amount is updated annually. In the past, the statutory minimum rate amount has been increased annually in line with the rate peg. We are considering whether a different approach may be needed in future for minimum rates given our methodology would result in each council having a different rate peg.

4.2 Some issues raised by stakeholders are outside the scope of this review

Some submissions to our Draft Report, particularly from councils, raised important matters that cannot be addressed in this review since they are outside its scope, including:

- **Uncoupling reform of the rate peg from the developer contributions reforms** – Many submissions noted that while out of scope of this review, the NSW Government should uncouple the reform of the rate peg from reform of the developer contributions system. Councils argued that changes to the rate peg will not be enough to fund changes to the developer contributions system. Many submissions suggested the new rate peg may simply shift the cost burden associated with development (from developers) on to ratepayers and councils and not necessarily provide revenue certainty for councils.[28]
- **Issues with the ratings system** – Submissions raised several matters related to inequities in the NSW ratings system. Examples include how pensioner rebates are funded, the structure of rates (i.e. minimum and base/ad-valorem rates), and the benefits of basing the ratings system on the improved, rather than the unimproved, value of land.
- **Regulatory burden and cost shifting** – Submissions suggested past cost shifting was decreasing the financial viability of the sector.[29] Examples raised include how the Emergency Services Levy (ESL) and Stormwater Developer Charges are funded.[30] These matters cannot be addressed through our review.

- **Ad valorem rates should be based on capital improved value (CIV)**: In our 2016 review of the local government rating system, we recommended CIV be mandated as the basis for setting ad valorem rates in metropolitan areas. The NSW Government did not accept this recommendation. Many submissions to our Issues Paper and Draft Report expressed a preference for using CIV. Regional councils generally only supported a move to CIV if it was optional for regional councils.
- **Depreciation costs**: Councils have significant depreciation costs associated with ageing assets, such as community buildings, roads, footpaths and parks. Some councils suggested linking a population factor with depreciation costs.[31]
- **Cost burden of non-rateable properties**: Many stakeholders were concerned about the cost burden on ratepayers from non-rateable properties.[32] Non-rateable properties can take many forms:
  - secondary dwellings, such as granny flats or short-term holiday lettings being built on farmland
  - community housing
  - Crown land, which means some State-owned enterprises that operate for a profit are exempt from rates
  - retirement properties, which may fall under a single title.

  The burden of funding service provision for these properties falls on other ratepayers, some of whom noted that "further increases in exempt properties within a Local Government Area (LGA) will result in the rateable land ratepayers paying a higher rate to subsidise the cost of services provided to exempt land."[33]
- **Rating categories are not sufficiently flexible to account for different uses**: Several councils told us they have significant numbers of residential properties in their area used for Airbnb and other holiday lettings. Although these properties are operated as a business, they are charged residential rates. Councils indicated they need flexibility to charge business rates for these properties.
- **Pensioner rebates**: Many councils have older populations and consequently have higher cost burdens associated with funding councils' portion of the pensioner rebate. The burden of paying for the rebate falls on other ratepayers. Several councils raised concerns with the cost burden of increasing pensioner rebates, echoing the submission from Local Government NSW (LGNSW) which noted a pensioner rebate reimbursement gap of $61 million in 2015-16.[34]
- **Rate increases and affordability**: General concerns were raised by ratepayers about rate increases and how affordable these were for vulnerable groups of ratepayers.[35]
- **Council efficiency and effectiveness**: Some ratepayers expressed concern around the efficiency and effectiveness of services provided by councils, and the need for councils to operate in an efficient and effective way with accountability, good governance, and high quality management.[36]

4.3 Other funding sources remain important for councils to fund growth

Our methodology will not solve all issues raised by councils. Other funding sources will therefore remain important for councils to fund growth.

4.3.1 Using special variations for population–growth related issues

We expect our methodology will reduce, but not eliminate, the need for special variations. We expect councils will continue to use the special variation process to address some population growth-related issues including:

- to 'catch up' on past population growth, where this is significant and has reduced per capita general income over time
- where per capita general income does not accurately reflect the costs of servicing the population and a one-off adjustment to the rate base is required
- to fund capital costs of infrastructure to service population growth that cannot be met while maintaining per capita general income or through other revenue sources (such as infrastructure contributions)
- where increases in general income are needed to accommodate a large service population.

IPART is reviewing its special variation process to simplify and streamline the process. We will be consulting with stakeholders as part of the review of the special variations process.

4.3.2 Making effective use of infrastructure contributions

Councils should use infrastructure contributions to fund infrastructure needed to service development. To ensure contributions plans are used most effectively, councils should regularly review and update their contributions plans.

The NSW Government has developed a roadmap to implement reforms to the infrastructure contributions system in NSW.[37] The proposed reforms are based on recommendations made by the NSW Productivity Commissioner following the review of the infrastructure contributions system in NSW. The NSW Government's proposed reforms aim to, among other things, enhance the capacity of councils to support growth and better align infrastructure contributions and strategic planning and delivery.[38]

4.3.3 Role of state and federal government grants

We expect that some councils will remain reliant on state and federal government grants, such as those with declining populations and those with populations less able to afford rate increases.[39] Where government funding is intended to fund capital or operating costs associated with population growth, funding should remain targeted to those councils that need it most.

Appendices

A The impact of population growth on council costs and revenue

This Appendix sets out:

- our approach
- what we found about councils' costs
- how costs are funded.

We investigated the impact of population growth on council costs and revenue to better understand the impacts of reform on the rate peg. We informed our analysis by:

- engaging The Centre for International Economics (The CIE) to undertake a desktop analysis of council costs and revenues
- considering information provided by councils through submissions to our Issues Paper and Draft Report.
- developing case studies with councils to highlight specific issues
- interviewing high-growth and regional councils
- conducting workshops with regional councils and metropolitan councils.

We found:

- The main driver of a council's costs is the size of its population or number of ratepayers in an area. Council costs per person vary across metropolitan, regional and rural councils.
- The relationship between operating and capital expenditure is mostly linear.
- Some evidence of economies of scale exist. However, there is also evidence of additional costs associated with a growth phase, which are predominantly capital costs.
- The council costs that increase with population growth depend on the type of development that occurs as there are differences between greenfield and infill developments.
- A growing gap exists between population growth and the additional revenue councils receive from population growth.
- Councils have highlighted that per capita rates are decreasing while costs are increasing.
- While expenditure has grown over time, rates revenue has not kept pace with population growth.
- Depreciation expenses vary between councils and backlog ratios may not be a good indicator of falling service levels.
- A rise in secondary dwellings like granny flats and other non-rateable properties increases the population without any change to rateable income.

We also found:

- Historical evidence and analysis of methods for increasing rates suggest the costs of growth are not being fully met for NSW councils in general. Faster growing councils tend to be unable to recover additional revenue in proportion to their growth.
- An expenditure gap exists between the cost of growth and what councils spend. A smaller increase in the operating margin (revenue less operating costs) exists for faster growing councils.
- Councils have recovered some growth-related revenue through supplementary valuations. However, a councils' capacity to recover enough through supplementary valuations varies depending on their rate structure, land values and the type of development. On average, councils are recovering around 60% of the costs of growth (using per capita rates as a proxy for the costs of servicing an additional resident) through supplementary valuations.
- We expect under-recovery of the costs of growth means growing councils will be unable to maintain their service levels. However, there is insufficient data on service levels to adequately test this proposition.

We learned from councils that the greatest challenge of a growing population is the expanding gap between costs of servicing their communities and the revenue obtained from their 2 main revenue sources: rates and developer contributions. The reasons for the expanding short fall between costs and revenue vary between councils – including differences in demographics, whether they are metropolitan or regional and whether growth is mainly from greenfield or infill development:

- Infill population growth is mostly associated with new apartments which are usually charged a minimum rate.
- Regional councils cover larger areas but service less population. They also provide a more diverse range of services to their communities, which often have less capacity to pay.
- Pensioner rebates – councils with many pensioners note that the NSW Government continues to fund 55% of the rebate. The remaining 45% is a cost to councils and communities. As the ageing population grows, so too does the gap between what is funded and what is left to be recovered by councils and their ratepayers.
- Seasonality of population influxes adds pressure to services, with limited scope for councils to pursue user-pays approaches to recover the costs. Influxes may be from daily employment and business, tourists, short-term seasonal farm workers, mine staff or those working on multi-year major infrastructure projects like Snowy Hydro 2.0 or highway upgrades. For some councils there are considerable daily pressures on facilities from being business and employment hubs.
- Demographics influence council costs differently, for example, demand for aged care, childcare and social housing can vary, with their costs being distributed among the ratepaying community.
- Some councils noted the legacy of disasters like bushfires and flood are experienced for a longer time than what may be covered by disaster funding.

- We heard from some regional councils that COVID-19 has further challenged population growth forecasts, with increased intrastate migration to regional areas and less movement of young adults to metropolitan areas.

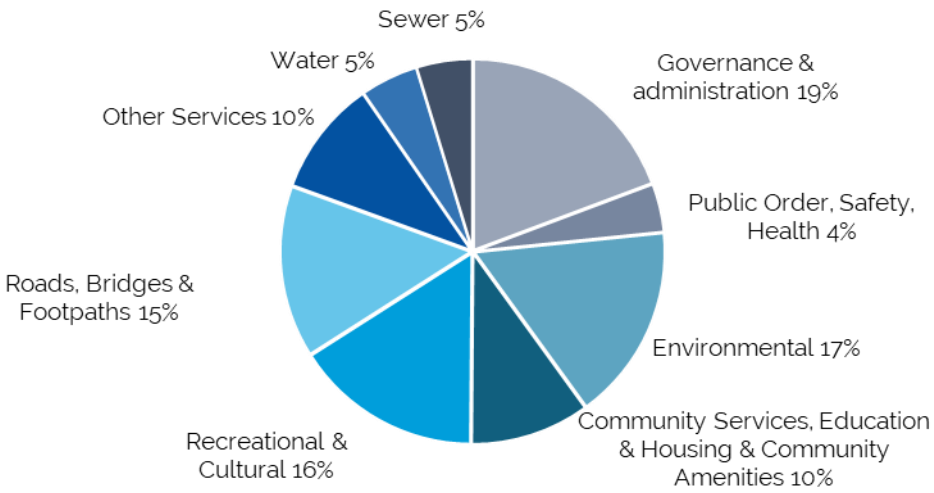
A.1 Councils provide a range of functions and services

The functions and services councils provide to their residents were valued at around $12.1 billion in 2018–19.[40] The functions and services provided and the costs of providing these vary between councils. Costs on a per capita basis are much higher for regional and rural councils because:

- they have lower population bases from which to recoup rates revenue
- they often provide additional services to their communities (such as aged care)
- they often service larger geographical areas and may need to provide multiple access points for service delivery
- some regional councils hold and maintain significant asset bases.

Figure A.1 sets out the typical cost breakdown across a range of council functions and services. The largest proportion of council expenses are in governance and administration (19%), environment activities (17%) and recreational and cultural activities (16%).

Figure A.1 Cost breakdown for council functions and services for 2018–19



Note: Not all functions are undertaken by all councils – for example, metropolitan councils do not incur costs related to water and sewer because these are provided by Sydney Water.

Source: IPART analysis and OLG Your Council data,

The annual cost per person varies across council types. **Table A.1** sets out the costs per person for different council types:

- Rural councils have higher costs per person than other council types. For example, annual governance and administration costs for rural councils are $1018 per person – $751 higher than the $267 per person incurred by metropolitan councils. Further, roads, bridges and footpaths have the highest annual costs per person for rural councils at $1407 per person – 1167% higher than the costs incurred by metropolitan councils.

- Metropolitan and metropolitan fringe councils have lower annual costs per person than other council types due to economies of scale arising from higher population densities in smaller geographical areas. For metropolitan councils, costs per person are lower, at $1141 per person in 2018–19 – 80% lower than rural councils at $5605 per person and 34% lower than all councils at $1717 per person.

Table A.1 Council costs per person, by council type, 2018–19

Cost ($/person)	Metropolitan	Metropolitan fringe	Regional town/city	Large rural	Rural	All councils
Governance and administration	267	340	292	499	1018	304
Public order, safety, health	64	49	63	100	217	64
Environmental	228	249	321	290	290	261
Community services, education and housing and community amenities	152	141	155	254	548	159
Recreational and cultural	239	206	273	337	457	250
Roads, bridges and footpaths	111	193	318	804	1407	229
Other services	79	97	241	452	1081	154
Water	n/a	63	165	319	396	151
Sewer	n/a	70	177	208	191	145

Note: n/a—Water and sewer expenditures are not incurred for metropolitan councils because these services are provided by Sydney Water.

Source: IPART analysis and OLG, Your Council data

Council submissions to our Issues Paper and Draft Report noted costs vary depending on several factors:[41]

- **Younger families** increase demand for facilities such as community facilities and recreational spaces such as sports fields and playgrounds.
- **Older generations** have different expectations and demand services such as community halls and libraries.
- **Social housing** such as community housing and aged care are increasingly operated by public benevolent institutions or charitable organisations that are exempt from paying rates. Councils with this type of residential accommodation continue to provide services such as libraries, footpaths, open space and leisure facilities. However, no revenue is recouped for these costs. Social housing is not evenly distributed across councils and some councils' experience higher levels of non-rateable properties.
- **Pensioners** pay reduced rates. The NSW Government funds 55% of the pensioner rebate, with the remaining 45% subsidised by the council.
- Councils that settle **humanitarian entrants or refugees** into their local government area (LGA) face different types of costs to provide and support for this type of population growth.

- **Day visitors** come into some LGAs for employment. While these visitors do not pay rates, they contribute to wear and tear on local infrastructure (e.g. increased traffic on roads).
- Increasing numbers of **tourists** use, but do not pay for, local facilities in some LGAs such as Byron Bay, Tamworth and Waverley. While councils can recoup revenue from hotels that are categorised as 'businesses' for rating purposes, residential properties that are let as Airbnb rentals or other holiday lettings must be charged residential rates.
- **Secondary dwellings** do not provide facilities such as off-street parking and have little or no recreation space. Costs of providing these facilities fall on councils without adding to rate revenue. Submissions note this does not align with taxation principles of efficiency or equity.

We conducted interviews and workshops with councils to inform our analysis. These sessions highlighted that, while some issues are common across all councils, regional and rural councils face particular challenges. These challenges are discussed below.

Issues facing regional and rural councils

- Regional and rural councils face a variety of cost pressures
- Short-term visitors can add to costs of councils
- COVID-19 may increase regional population

Regional and rural councils face different cost pressures

- Regional and rural councils provide a more diverse range of services to their communities – for example, aged care, childcare, water and sewerage services.
- Regional and rural councils have smaller rate bases over which to spread growth-related costs.
- Regional and rural communities are typically more geographically dispersed with lower population density. To ensure services are accessible and equitable, councils may need to pay for outreach services and multiple delivery points.
- In some cases, regional and rural ratepayers have less capacity to pay, or their populations are in decline, and are already paying rates much greater than ratepayers in metropolitan areas.
- Many regional and rural councils are facing critical housing shortages, which is leading to increases in secondary dwellings that add to population density but not to rates revenue.
- Some regional and rural councils have been more successful than others in obtaining grants for infrastructure projects. Where councils are successful, the ongoing maintenance and operating costs of that infrastructure must be paid for by ratepayers.
- Depreciation of ageing asset bases and asset renewals are significant issues for regional and rural councils. Many have substantial backlogs. Increases to the rate peg are insufficient to cover these costs.

Short-term visitors can add to costs of councils

- People visit LGAs for a variety of different reasons, such as tourism, work or study.
- Temporary increases in population due to major infrastructure or other projects can attract workers and their families for several years during the project. These increases in population may not be captured in population data if they visit the area between censuses.
- High visitor numbers place greater strain on infrastructure (such as roads) and services. However, the cost of maintaining infrastructure and providing services is paid for by ratepayers.
- Councils have had mixed success imposing user charges to target visitors (such as parking charges), but in many cases have limited ability to fund services through user charges. Revenue obtained from user charges is insufficient to meet the cost of servicing visitors.
- For councils with high levels of tourism, use of residential properties for Airbnb or other holiday rentals poses challenges. While these properties are run as businesses, they are categorised as residential properties and charged residential rates.
- Some regional and rural councils have ageing populations with significant numbers of pensioners. For these councils, pensioner rebates are a significant cost burden.

COVID-19 may increase regional population

- Regional and rural councils told us COVID-19 has significantly increased intra-state migration from metropolitan areas to the regions. Young professionals are also choosing to remain in regional areas rather than move to metropolitan areas. Councils expect this increase in population to be permanent.

This information was drawn from submissions by regional and rural councils; interviews and workshops with regional councils.

A.2 Council costs increase with population growth

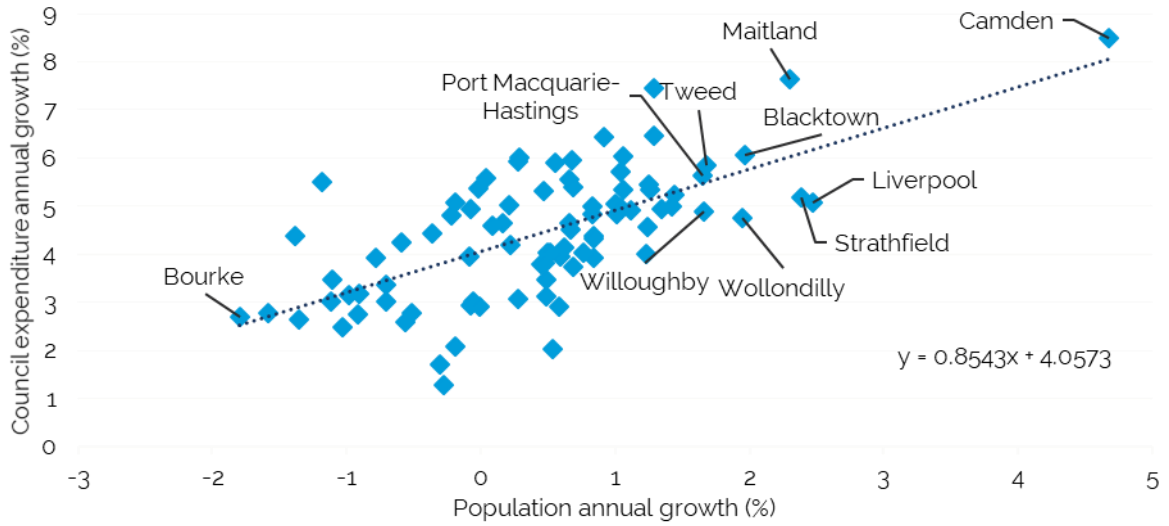
Our research shows council costs increase as population grows. Cost increases are driven by extra residents, extra rateable and non-rateable properties, and increased community expectations of the functions and services councils provide.

Costs associated with population growth include capital and ongoing operating costs, including significant depreciation costs that councils use to renew ageing assets. Costs are also incurred to replace assets to meet regulatory requirements regarding accessibility and sustainability and increasing community expectations.

Council cost increases also depend on the type of development undertaken to cater for growth, which can either be greenfield and infill developments. These costs are discussed in section A.3.3 of Appendix A.

Historically, population growth in NSW has increased council expenditure. **Figure A.2** shows a 1% increase in population results in a 0.85% increase in council operating expenditure.[42]

Figure A.2 Population and council operating expenditure average annual growth in NSW from 1999 to 2019



Note: Excludes LGAs that did not exist for the entire sample period. Excludes Albury, Lithgow and Oberon, whose borders changed in 2004. Excludes Hills and Hornsby, whose borders changed in 2016.

Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, p.15.

Analysis of the functions and services provided by councils show that population, or a highly correlated factor such as number of rateable properties as the main cost driver across every expenditure item.[43]

We also investigated whether any associated economies of scale exist, and found the following:

- expenditure for larger councils does not increase in the same proportion as the increase in population.
- there are economies of scale for some cost items.
- doubling a council's population implies a range of costs increasing by 72% to 95%.[44]

Table A.2 sets out the identified economies of scales in different functions and services councils provide in different states. For NSW councils, 6 of the 11 items identified have economies in scales.

Table A.2 Economies of scale in council expenditure categories, by state

	NSW	VIC	QLD	WA	SA	TAS
Administration	Yes	Yes	Yes	No		Yes
Recreation and culture	Yes	No	Yes, for councils less than 10,000 people	No	No	Yes
Waste management		Yes	Yes, for councils less than 10,000 people		No	Yes
Transport	Yes	Yes	Yes, for councils less than 10,000 people	No	No	No
Law, order and public safety	Yes		Yes, for councils less than 10,000 people	No	No	No
Education, health, welfare and housing	Yes		Yes, for councils less than 10,000 people	No		No
Planning and building control	Yes				No	Yes
Family and community services		No		No	No	
Aged and disabled Services		No			No	
Environment		Yes	Yes, for councils less than 10,000 people		No	
Business and economic services		Yes	Yes, for councils less than 10,000 people			

Note: The CIE report has approximately aligned expenditure categories across councils. These categories may vary.

Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, pp 9–10.

Overall, a council's costs will increase with the size of its population. Cost increases are driven by increases in assets and the services provided. In submissions to our Issues Paper and Draft Report, councils and peak bodies submitted that the following general costs increase with an increase in population:[45]

- ongoing infrastructure maintenance and capital costs
- asset renewals and depreciation of buildings, roads, footpaths, parks and other assets
- providing community services such as libraries and aquatic centres
- providing new and embellished assets
- increased demand for services in general
- increases in service-related costs, including overheads such as information and communication technology and human resources
- maintenance and operational costs of developer-constructed assets
- increases in secondary dwellings, which do not offer services and facilities such as off-street parking and little to no recreation. Costs of providing these facilities fall on councils, with no additional rates payable. As noted previously, councils submitted this does not align with taxation principles of efficiency or equity.
- increased service level expectations of new residents in LGAs who demand new and embellished assets and services, which increased maintenance costs.

- costs of maintaining environmentally sensitive land or riparian corridors that have little or no development potential, which can include bushland or land subject to flooding. In some cases, this land has been dedicated to local councils who manage it in perpetuity.
- costs of acquiring land and property for affordable housing, open spaces and recreation. Sydney-based councils submitted that this is an expensive venture for them.

A.3 Operating and capital costs increase with population

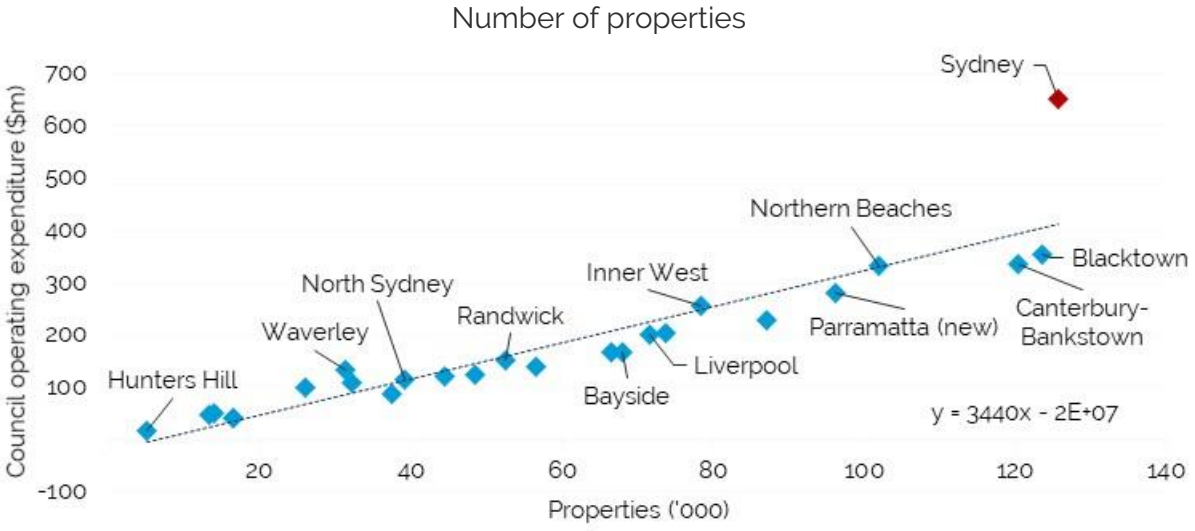
We have established that councils' costs increase with population growth. In this section, we examine the types of costs that increase – that is, the relationship between population growth and growth in operating and or capital costs.

A.3.1 Drivers of councils operating costs

When population increases, the number of rateable properties usually also increases. Providing functions and services for these rateable properties increases a council's operating costs. Operating costs for NSW councils have increased as the number of rateable properties has grown. **Figure A.3** and **Figure A.4** show that councils' expenditure increases vary with council type. We found on average, a council's expenditure:

- increases by $3440 for each additional rateable property in metropolitan LGAs
- increases by $3250 for each additional rateable property in regional areas.[46]

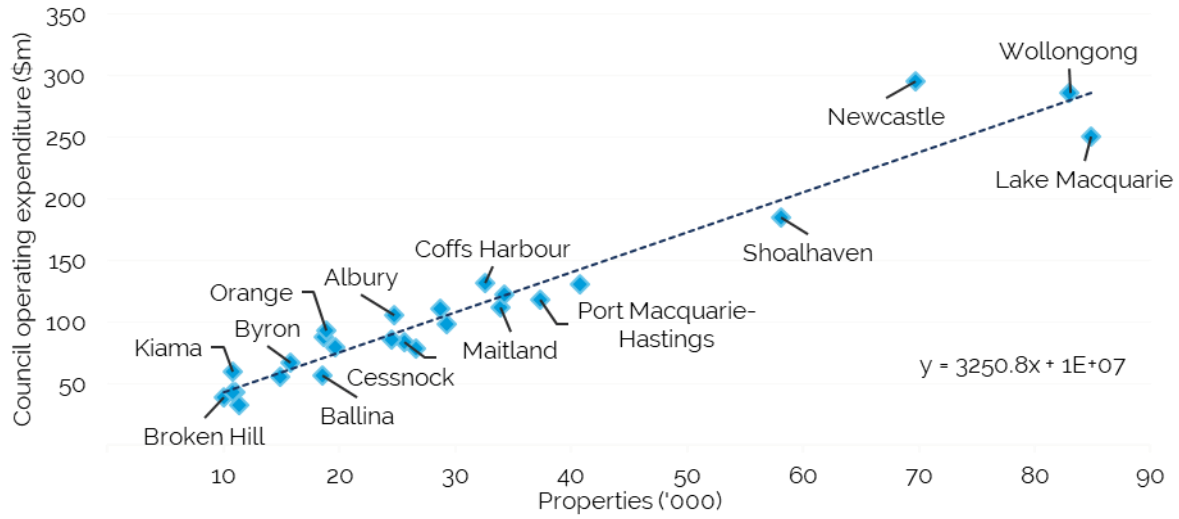
Figure A.3 Council operating expenditure and rateable properties in metropolitan councils, 2018–19



Note: Operating expenditure on a per property basis is significantly higher in the City of Sydney because most (approximately 75%) of its rates income is paid for by businesses.

Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, p 16.

Figure A.4 Council operating expenditure and rateable properties in regional councils, 2018–19

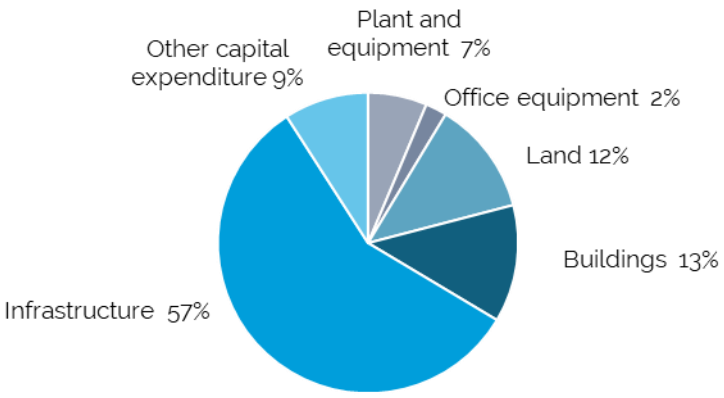


Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, p 16.

A.3.2 Drivers of council capital costs

In 2018–19, responses to IPART's survey, which informs the local government cost index, indicated total capital expenditure by NSW councils was $3.3 billion, or 37% of all council costs. **Figure A.5** shows 57% of all capital costs incurred by councils was spent on infrastructure such as roads, bridges, and footpaths. The second largest capital expense was buildings (13%), followed by land (12%), and other capital expenditure (9%).[47]

Figure A.5 Capital costs across different activities for all NSW councils, 2018–19



Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, p 20.

Our analysis found capital expenditure incurred by councils:

- will be more uneven from year to year than operating expenditure,
- is driven by both the level of population and the amount of population growth, specifically:
  - larger councils and faster growing councils incur higher capital expenditure per year
  - each person is associated with capital expenditure of $202 per year
  - each additional person in an LGA is associated with capital expenditure of $12,938 per year.[48]

A.3.3 Costs vary with the type of development

The type and magnitude of council costs from population growth also depend on whether the development undertaken to cater for growth is greenfield or infill development. Greenfield development occurs on land with no previous urban footprint and requires new infrastructure. Infill developments occur on land previously developed, including urban renewal precincts.[49]

Differences in costs exist between greenfield and infill developments. Costs associated with infill developments include redeveloping existing infrastructure. Councils with infill developments use almost 67% of their rates revenue to fund this infrastructure, with less revenue available to provide all other services.[50]

In contrast, councils with greenfield developments use 36% of their rates revenues to pay these infrastructure costs.[51] Typically, greenfield developments incur high capital costs upfront. Councils with greenfield developments tend to raise a larger proportion of their revenue from developer contributions or works-in-kind agreements, which reflects:

- the higher need for new infrastructure to support a growing community[52]
- a clearer nexus (or link) between the new infrastructure required to enable development and the services and amenities required.

The difference in costs between greenfield and infill development poses challenges for councils' financial sustainability and ability to maintain consistent service levels for growing communities with increasing expectations.[53] In submissions to the Issues Paper and Draft Report, councils note differences in costs between greenfield and infill developments:

- Greenfield developments require construction of new assets such as roads, stormwater management assets, open space and in some cases the purchase of environmental conservation land. While some local infrastructure is initially constructed and paid for by developers, councils provide the ongoing management and maintenance of the assets. Councils also note greenfield developments have an impact on existing assets and increase demand for community services across the LGA.[54]
- Councils noted that in some cases the infrastructure required to service infill development already exists. However, the demand from new residents still impact existing infrastructure, increasing maintenance and operational costs. When infill developments contribute to the need to deliver new infrastructure or open space, it can come at a significant cost to councils because of the higher land values and construction costs in built urban areas.

We worked with Blacktown City Council and Bayside Council to provide specific examples of greenfield and infill developments catering for population growth, and the costs to councils associated with these developments. These examples are set out below.

Costs and revenue from greenfield development Blacktown City Council[a]

Blacktown City Council provided information to show the costs of servicing greenfield development and the increase in rates revenue it receives after development occurs.

Riverstone and Alex Avenue precincts

The Riverstone and Alex Avenue precincts cover 1395 hectares located in Sydney's North West Growth Area. When finished, the new community will provide an estimated 19,842 new homes for 58,279 people.

The two precincts are covered by one contributions plan, which includes $903 million for land and works for local infrastructure. Around $542 million (60% of the plan) is allocated to acquiring land for local infrastructure. Costs in the contributions plan have been paid for by developers and subsidised by the State Government.

The plan provides for active and passive open space (sporting fields and parks/playgrounds), water management facilities (stormwater detention basins, channels and stormwater treatment), traffic management facilities (local roads, roundabouts, traffic signals) and land for community facilities (aquatic centre, library, community centres). It does not include the construction costs of community facility buildings.

Population growth increases council costs

The information from the council highlights the capital and operating costs associated with the new development. Population growth within greenfield areas requires:

- new essential infrastructure to enable development
- replacing existing assets, such as roads
- additional community facilities to support the higher population.

[a] This case study was developed with Blacktown City Council. Information was provided 18 May 2021.

According to the council, the increased capital costs not covered by developer contributions can be significant. For example, the increased population in the Riverstone and Alex Avenue precincts has resulted in, or contributed to, the need for:

- $224 million for an aquatic centre and community hub with an indoor recreation centre
- $128.5 million for additional open space to support higher than anticipated population
- $30 million for an additional depot and administration centre
- $580,000 per annum for asset renewal cost for section 7.11 funded transport and water management infrastructure.

External borrowing to fund additional capital infrastructure would result in overall interest costs of around $132 million or an average cost of $6.5 million per annum.

The council estimates ongoing costs from the additional population in the precincts to be $5.4 million per annum. The increased costs reflect additional capital works and expanded existing services, including:

- community service subsidies (for the aquatic centre/community hub)
- open space, transport and water management infrastructure maintenance costs
- pensioner rebates, new information technology systems, street lighting, and postage costs
- local government election, Valuer General and bank fees
- support and frontline staff.

The council's rates revenue increases, but not enough to maintain per capita rates

Before adopting the contributions plan in 2010, the council reported average rates revenue for the area of $764 per capita, with a total rate yield of $6.4 million (2021 dollars). The population was around 7800 and the area mostly comprised larger lots of 2 hectares or more.

For 2020–21, average rates have fallen to $447 per capita, although the total annual rate yield increased to $15.7 million. Total population is now around 35,000. Since 2010, the increase in rates revenue can be attributed to a net increase in unimproved land value of around $9.3 million. More than half of all properties are levied the minimum rate which is currently $978 per dwelling.

Costs and revenue from infill development Bayside Council[b]

Bayside Council provided information to show the costs of servicing infill development and the increase in rates revenue it receives after development occurs. This case study also highlights how new infill developments usually pay a minimum rate.

Overview of Bayside Council local government area

Bayside LGA is located 7 to 12 km south/south-east of Sydney's central business district. It was formed in 2016 following the merger of the City of Botany Bay and the City of Rockdale. It has over 62,036 dwellings with an average household size of around 3 people per dwelling. Bayside has a multicultural population and diverse housing, including detached dwellings, medium density housing and high-rise development. Central to the area are the international transport hubs of Kingsford Smith International Airport and Port Botany.

Bayside has a current residential population of approximately 178,000, and a population density of 36.35 persons per hectare. The population is expected to increase to 234,600 by 2041. The council estimates the non-resident working population of 72,770, results in a combined total population of 251,150.

Approximately 90% of new dwellings built in the area are medium and high-density infill development.

Infill development requires councils to enhance existing, and deliver more, open spaces and community assets

New housing and people increase demand for community assets such as parks, open spaces, libraries, sports fields, public pools, and other communal spaces.

Most new developments are apartments and townhouses, which increases demand for open space and community assets. Once constructed, new assets require ongoing maintenance and servicing. Further, existing assets that need replacing must be built to modern standards, which integrate costly aesthetically enhanced, sustainable design elements with higher safety standards.

On average, the council has delivered $45 million in capital works per annum over the past 3 years, including both new and renewed assets. It has budgeted another $60 million of capital works for 2021–22. Some, but not all, of the council's capital works are funded through developer contributions.

[b] This case study was developed with Bayside Council. Information was provided 14 May and 11 June 2021.

The council projects infill development–related new infrastructure and asset renewal over the next 10 years will cost approximately $750 million. However, funding for this expenditure is forecast to be only $468 million, leaving a net funding gap of $282 million (or $28.2 million per year). The council also forecasts an asset maintenance shortfall of an additional $40 million over the same period (i.e. $4 million per year).

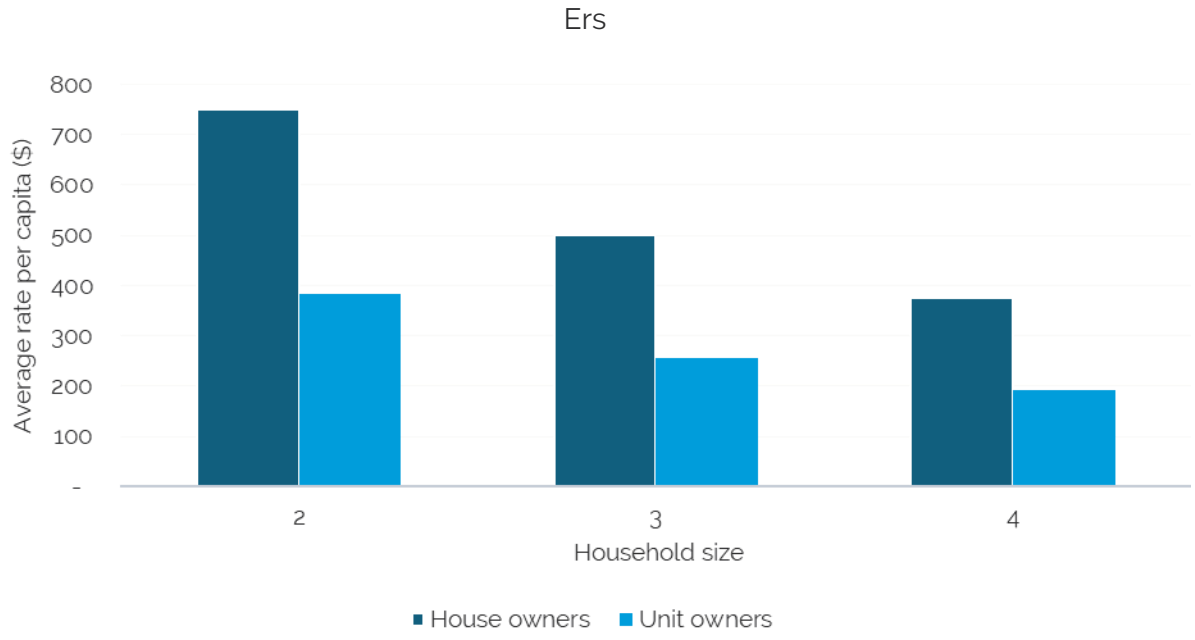
Income from rates may not keep pace with expenditure for infill councils

The council estimates approximately 60% of its total revenue (excluding capital grants) comes from rates and annual charges.

The current average ordinary rate per capita is approximately $450. In contrast, average operating expenditure per capita is $840, while average operating and capital expenditure per capita is $1100.

The additional rates income the council receives when new dwellings are built does not cover the costs of population growth. Because new dwellings are predominantly medium and high-density infill development, rates income per capita is falling. The figure below shows the average rate per capita for a house and a unit block on a similar parcel of land across different household sizes.

Figure A.6 Average rate per capita (house owners vs unit dwellers)



Source: Information from Bayside Council, 14 May 2021 and 11 June 2021.

The council attributes the revenue shortfall to 3 key factors:

- Historically, the rate peg has not accounted for population growth.
- The LGA's minimum rate is too low.
- The rating system is flawed because the ad valorem component of rates is based on the unimproved value, rather than the capital improved value, of land.

Without reform to the rate peg, the council must rely on special variations to fund ongoing costs associated with servicing its growing population.

A.4 How costs associated with population growth are currently funded

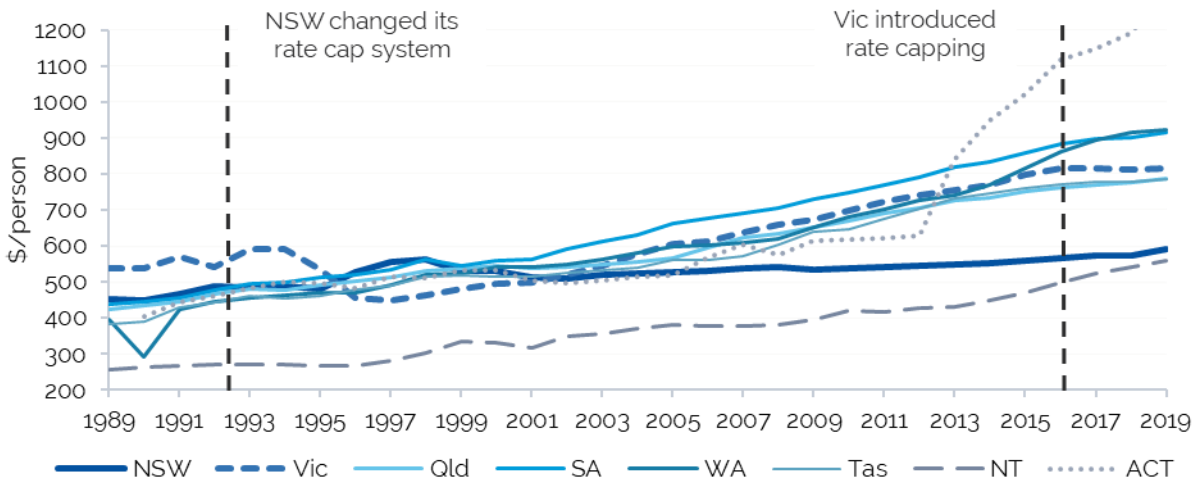
As local communities grow, councils need to provide infrastructure and services to new residents and businesses. In this section we discuss the different ways councils source revenue.

In 2018–19, NSW councils collected total revenue of around $15 billion through the rating system. NSW councils' rates revenue has grown over time, but not as quickly as other components of revenue.

Since 1977, rates in NSW have been subject to a rate peg which caps the amount of general income (which is predominantly compromised of rates revenue) a council can earn. As a result, rates revenue has declined as a proportion of total revenue.

Currently, NSW and Victoria are the only states with a cap on rates revenue growth. **Figure A.7** shows rates revenue received by local governments in NSW has grown at a significantly slower pace compared with other states and territories, where a rate peg does not apply.

Figure A.7 Real council rates per capita, by jurisdiction, 1989 to 2019

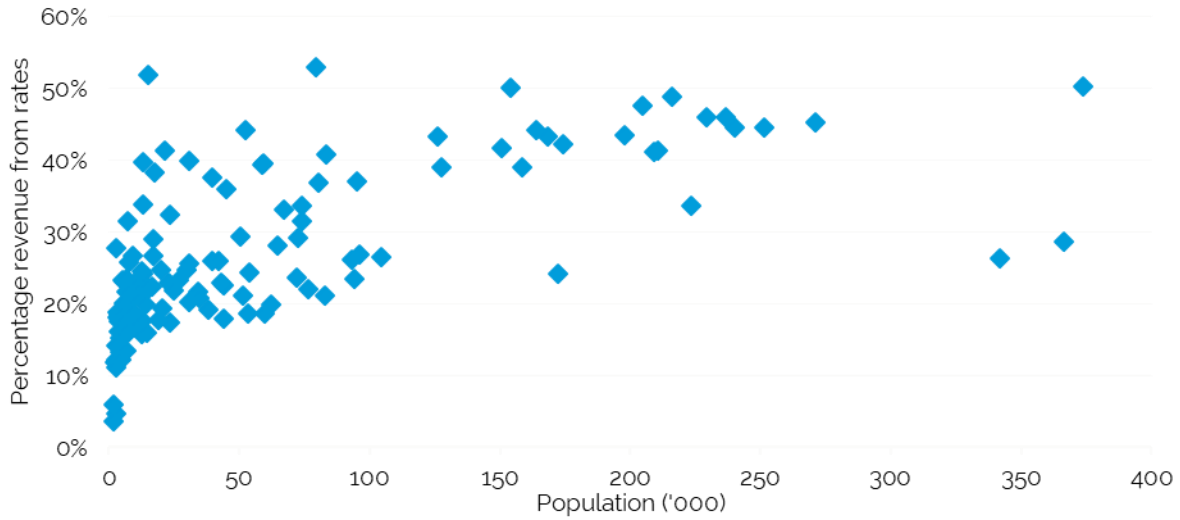


Note: ACT increases rapidly because it has transitioned away from stamp duty and towards land tax (i.e. rates). Municipal rates revenue is measured on a cash basis up to 1997-98, and on an accrual basis thereafter. Each state's council rates has been adjusted using the All Groups Consumer Price Index for that state's capital city.

Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, p 27.

Figure A.8 shows that for councils with more than 100,000 residents, rates make up a larger share of total revenue. For these councils, rates are 40% of their total revenue, compared with 17% for councils with fewer than 10,000 residents.[55]

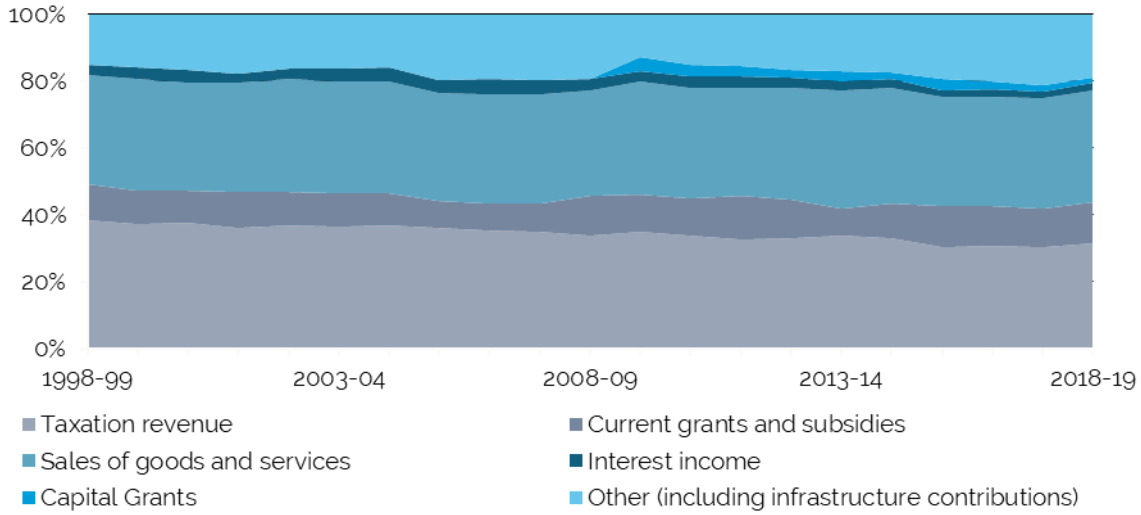
Figure A.8 Rates portion of revenue for NSW councils, 2018–19



Source: OLG Your Council data, IPART Analysis.

Figure A.9 indicates that over time rates have become a smaller share of revenue, reflecting the operation of the rate peg.[56]

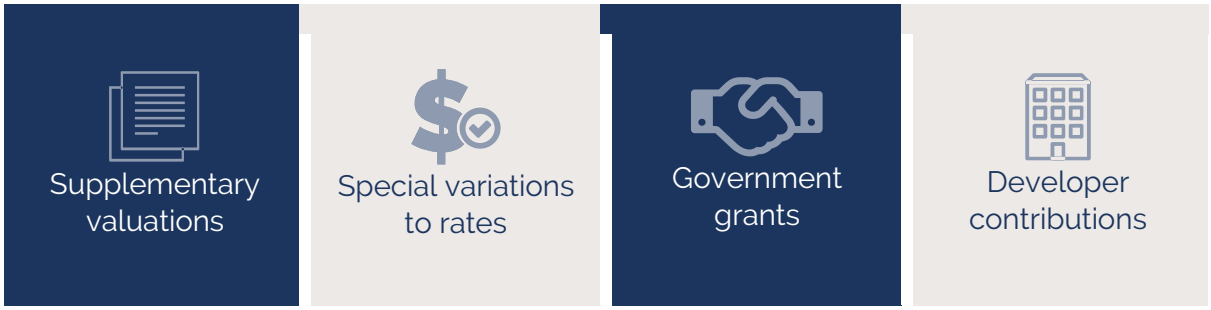
Figure A.9 NSW local government revenue sources, 1998–99 to 2018–19



Source: The CIE, Review of infrastructure contributions in New South Wales, 2 December 2020, p 25.

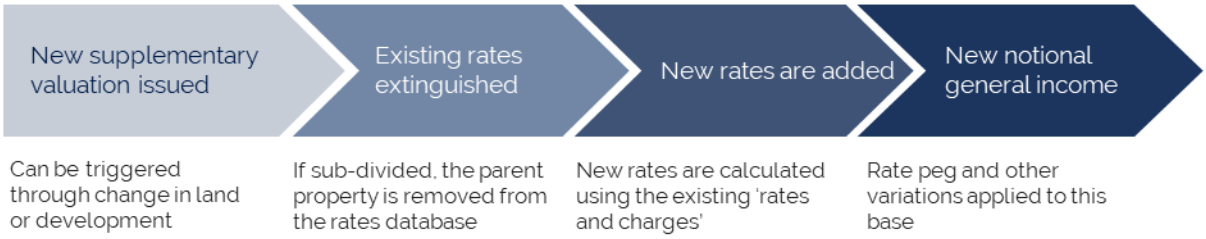
A.4.1 Council revenue outside the rate peg

The amount by which a council can increase its general income (mainly rates) is capped by the rate peg. There are several ways councils can source income to fund the costs associated with population growth other than through increases to general income from the rate peg. These include:



A.4.2 Supplementary valuations

Councils are partly compensated for higher population growth through higher rates revenue, mainly from the supplementary valuations process.[c] Councils can use additional income from supplementary valuations to provide services to additional residents and ensure that infrastructure is serviced and maintained.



Box A.1 describes the events that trigger a supplementary valuation.

[c] Rates can also grow through Crown Land Adjustments, however the impact is minimal.

Box A.1 When is a supplementary valuation issued?

When changes to a property are recorded, the Valuer General will issue a supplementary valuation with a new land value, outside the usual 3 to 4-year valuation cycle.

Supplementary valuations can occur where:

- there is a change in the property area, description or dimensions of the land
- land is rezoned or there are changes to the features of the land
- a subdivision occurs
- land that was previously valued separately is valued together
- land that was previously valued together is valued separately.

Source: NSW Valuer General, Your supplementary Notice of Valuation – Fact Sheet, January 2020.

Rate structures, land values and the type of development determine the increase in rates revenue from the supplementary valuation process.

Box A.2 provides an example of a supplementary valuation.

Box A.2 Supplementary valuation example

The supplementary valuation process allows a council to receive additional income because of changes in rateable properties:

- A property pays rates of $2000 as a residential house.
- The property is rezoned and redeveloped into 20 apartments. Each apartment now pays $500 each in minimum rates.
- Total rates payable on the apartment block is $10,000. The council can increase its income by $8000.

Source: The CIE, Analysis of rate peg options to account for population growth, 19 May 2021, pp 28.

Councils with higher population growth usually have more development or redevelopment activities that trigger supplementary valuations, such as land rezoning and subdivision.

Historically, supplementary valuations have not fully compensated councils for increased costs due to population growth.[57] The supplementary valuation process usually results in most councils receiving less income from rates for each new resident compared with existing residents. Some types of developments, such as secondary dwellings, or developments on land owned by a public benevolent institution or public charity, result in population increases but do not trigger supplementary valuations. Councils therefore do not receive additional income to service these additional residents.

If rates were to increase in proportion to the growth in population, supplementary valuations would, on average, account for around 60% of this growth.[58] Our analysis indicates this percentage has increased over time as more councils seek to increase their minimum rates.

We found the relationship between population growth and growth in rates revenue was much weaker from 2008–2009 to 2018–19, than from 1998–1999 to 2018–2019.[59] We also found:

- Councils with no population growth have, on average, experienced growth in rates revenue of around 4.9% per year.
- For each percentage point increase in population growth, general income increases by approximately one-quarter of a percentage point, although the relationship is not statistically significant.[60]

IPART has previously noted that unimproved land values do not increase enough when higher density apartments and businesses are built to adequately compensate councils through the current ratings system.[61]

Even if rezoning occurs, the increase in rates from the higher unimproved land value will be much lower than the increase in costs to service more residents and businesses. This difference is because as housing density increases, land value becomes a smaller share of property value, and less representative of the costs of providing council services to ratepayers. In this situation, councils only receive additional income by levying fixed charges (i.e. base or minimum rates) across a larger number of properties.[62] A council's existing rating structure, that is the mix of *ad valorem* and fixed charges across categories, affects the amount of additional income received through supplementary valuations.[63]

The actual amount of rate growth that councils can receive from supplementary valuations depends on the:

- rate structure used by a council – for example, councils with:
  - a larger part of rates from minimum and base rates will receive a larger increase from supplementary valuations
  - larger differences between rates for land being rezoned (such as farmland to residential) will receive a larger increase from supplementary valuations
- land value increase from the rezoning – where there is a larger land value increase, then councils will receive a larger rate increase from supplementary valuations
- extent to which population growth is accommodated through new development, rather than in ways that do not trigger a supplementary valuation (such as more people in existing houses or secondary dwellings etc).[64]

Overall, submissions to our Issues Paper and Draft Report support supplementary valuations as they exist in the current rating system. There were mixed views about whether we should account for supplementary valuations in a rate peg that includes a population growth factor. Submissions raised the following points about supplementary valuations:

- Without an alternative model, supplementary valuations are the only mechanism that allows the rate base to expand with population growth.
- No change to the supplementary valuations process is needed, because existing parcels of land can be redefined by registering a new plan (mainly a deposited or strata plan) and re-evaluated following re-ascertainment or valuation objections.
- The supplementary valuation process is appropriate for small levels of growth that can be picked up each year and where the increase doesn't significantly increase costs. The process is not suitable for rapid or sustained population growth where the cost increase is more than the additional increase to the notional income that a supplementary valuation provides.
- Benefits from supplementary valuations depend on where growth is occurring – that is, the mix of base and *ad valorem* rates for the existing rate category to which new properties are being added.
- The increase in number of rateable properties from the supplementary valuation process is a delayed indicator of growth, but not a definitive measure. The process does not account for other types of population growth-related residential developments, such as granny flats and general property extensions, growth in boarding houses and seniors living developments, portable housing in residential caravan-park type developments, conversions of garages, and relatives living with their children.[65]

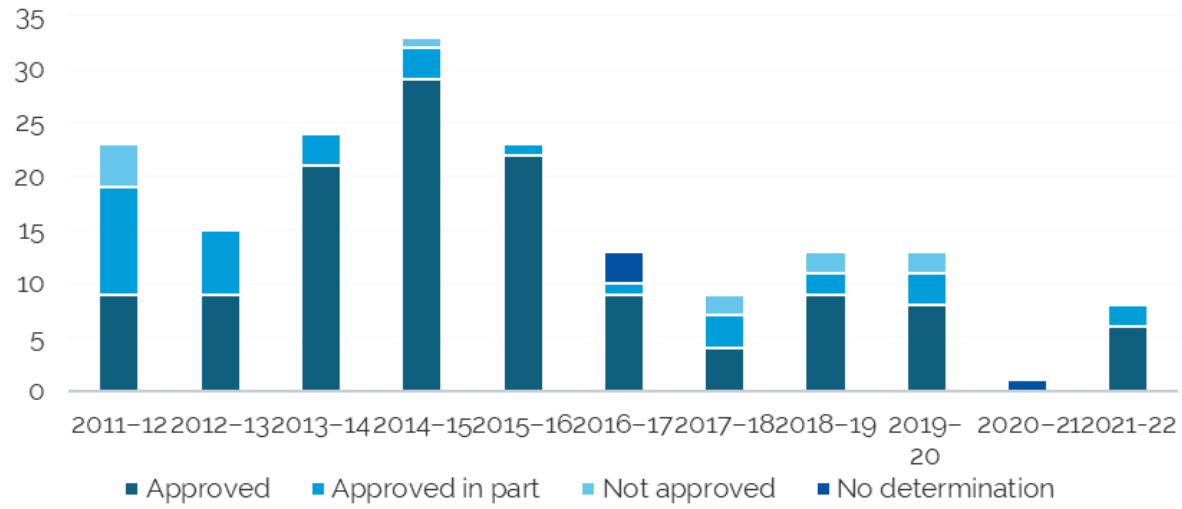
Generally, submissions considered the supplementary valuation process an inadequate measure of growth because it does not account for some types of growth. Further, the related increase in revenue does not keep pace with the increase in growth-related costs.

A.4.3 Special variations

Councils can also fund the costs of population growth by applying to IPART for a special variation (SV) to increase their general income by more than the rate peg. IPART assesses these applications against criteria established by the NSW Office of Local Government. Councils must demonstrate the need for the additional revenue, show evidence of community consultation, and assess the impact on affected ratepayers.

Since 2011–12, when IPART commenced setting the rate peg for NSW councils under a delegation from the Minister for Local Government, we have received 175 SV applications from councils (on average, around 16.7 applications per year) (**Figure A.10**). Of these applications, 19% were approved in part and 74% were approved in full.

Figure A.10 Special variation applications to IPART, 2011–12 to 2021–22



Source: IPART analysis

Councils can have different reasons for submitting an SV application to meet their expenditure requirements. Some of the reasons that councils applied for an SV to increase their general income over the recent 2021–22 process included:

- maintaining or improving service levels
- renewing infrastructure and deteriorating assets
- improving and ensuring financial sustainability
- delivering key priorities in a Community Strategic Plan and Delivery Program
- undertaking construction of large infrastructure projects such as aquatic facilities
- maintaining assets and infrastructure
- undertaking long-term maintenance and management of land dedicated by a developer.

A.4.4 Developer contributions

Councils can collect developer contributions via a section 7.11 contributions plan, which specifies the link between the new development and the increased demand for infrastructure. Alternatively, councils may levy up to 1% (in most areas) of the estimated cost of new development under a section 7.12 contributions plan to fund new infrastructure.[d]

[d] This is lower than what would be collected under a section 7.11 plan. The Productivity Commissioner's review recommended an increase to the maximum rate for section 7.12 levies, equivalent to 3% of residential development, which would enable more councils to benefit from the simpler requirements of the section 7.12 levy. Councils can also levy developer contributions through Voluntary Planning Agreements or Works-in-Kind Agreements.

Developer contributions must be used for the purpose for which they were collected, and within a reasonable time. These contributions provide for base-level infrastructure to support development and to meet the infrastructure needs of the growing population. However, they do not provide for the operating and maintenance costs of this infrastructure or increases in the volume of services demanded by the additional population.

Submissions to our Issues Paper and Draft Report noted limitations of developer contributions, including:

- whole of life costs such as operating, maintenance and renewal costs (whether infrastructure has been funded by contribution plans and grants, or dedicated by developers)
- infrastructure that has not been deemed essential by the state government, including libraries, community centres, aquatic facilities, and day care centres
- expansion of facilities and infrastructure for additional demand that is not allowed or viable under developer contributions
- costs of applying for an SV to account for population growth
- infrastructure service above base level
- unfunded portions of contribution plans (due to apportionment criteria)
- the cost of infrastructure above the cap on development contributions
- additional demand from development that is not funded by developer contributions.[66]

A.4.5 Government grants

As the gap between costs and revenue increases, there is a greater reliance on grant funding, especially for regional councils.

One mechanism for councils to fund the shortfall between revenue and costs is accessing federally funded Financial Assistance Grants (FAGs), which are distributed to the states and territories. These grants comprise a general-purpose component according to population (i.e. on a per capita basis) and an identified local road component relating to fixed historical shares. Councils have discretion to spend the grants according to local priorities.

The NSW Local Government Grants Commission makes recommendations to the Minister for Local Government about how to distribute funding to councils under the FAG program. Recommendations are in accordance with the national principles for allocating grants among local governing bodies (councils) under the Commonwealth *Local Government (Financial Assistance) Act 1995*.

B How we recommend adjusting the rate peg for population growth

This Appendix sets out:

- The approach we used to consider options and assess factors that could inform a revised rate peg methodology.
- Our analysis of council rate structures and who will pay the costs of growth under different development and ratings scenarios.

B.1 Options to adjust rates for the impact of population growth

We analysed NSW councils' costs and revenues and developed 2 options to reform the rate peg:

- **Option 1:** Varying councils' general income by a percentage change in a population growth factor. The growth factor could be a measure of additional persons or dwellings.
- **Option 2:** Varying council general income using a cost variable that captures the 'population contingent costs' of development. This cost variable would by multiplied by the increase in population or dwellings, and then divided by each council's general income to arrive at a growth factor.

Table B.1 sets out the 2 options we considered.

Table B.1 Options analysis

Option 1	Option 2
The growth factor would be equal to: Option 1a: $= \%\Delta \text{ population (by council)}$ Option 1b: $= \%\Delta \text{ rateable properties (by council)}$	The growth factor would be equal to: Option 2a: $\frac{\Delta population \times cost\ per\ pop.}{general\ income\ (year\ 0)}$ Option 2b: $\frac{\Delta rate.prop. \times cost\ per\ rate.prop.}{general\ income\ (year\ 0)}$

We assessed these options against the principles outlined in **Box B.1**. In practice, we found there is a trade-off between added complexities (typically around cost reflectivity) and a simple workable solution.

Box B.1 Implementation principles

We assessed options to adjust the rate peg for population growth against the following principles:

- No council would receive a lower increase in general income, relative to a rate peg calculated using the LGCI and productivity factor, under our methodology.
- The new methodology balances the NSW Government's commitment to protect ratepayers from sudden or excessive rate rises, while improving the financial sustainability of local governments.
- The methodology is consistent with taxation and pricing principles (where applicable), including:
  - taxation principles of simplicity, efficiency, equity and sustainability
  - pricing principles, such as those that create the need for costs to be incurred pay.
- The methodology is easy to implement, understand and administer in annual updates to the rate peg.

We engaged The Centre for International Economics (The CIE) to help us consider options to reform the rate peg. The CIE assessed the options against the principles outlined in **Box B.1**. Its findings are:

- Option 1 (specifically Option 1a) is a better implementation option, but Option 2 is a viable approach.
- Impacts on council revenue will depend on whether the chosen option accounts for the impact of supplementary valuations.
- Any options including a population factor are expected to have some impacts on existing ratepayers, simply because of the design of rate structures.

We agree with The CIE's analysis and consider Option 1 is the better approach to account for population growth in the rate peg. We prefer Option 1 for the following reasons:

- It recognises that service levels, and costs, are different across councils. Option 1 accounts for population growth by referring to the current costs per capita for each council.
- Our analysis found a mostly linear relationship between council costs and population growth. This relationship suggests the added complexity of implementing Option 2 may be unnecessary.
- Option 2 may be difficult to implement on a council-by-council basis.

Our recommended approach, based on Option 1, is outlined in our Final Report and in **Box B.2**.

Box B.2 Our recommended adjustment to the rate peg to account for population growth

Our recommended approach is to implement a methodology that:

- maintains total per capita general income over time
- reflects a linear relationship between population growth and council costs
- is based on the change in residential population for each council
- applies to all councils, including those experiencing low growth.

Rate peg methodology

We recommend maintaining each council's general income on a per capita basis as its population grows as set out below

Each year, we will determine and publish a rate peg for each council based on the following methodology:

$$Rate\ peg = change\ in\ LGCI - productivity\ factor + other\ adjustments\ + population\ factor$$

In this formula:

change in LGCI means the change in the local government cost index (LGCI).

More information on the LGCI, productivity factor and other adjustments we may make in determining the rate peg is set out in Appendix C. We have not considered other changes to the rate peg as part of this review.

Population factor for 2022–23:

Each year, each council will have a population factor equal to the annual change in its residential population, adjusted for revenue received from supplementary valuations.

The population factor is equal to the maximum of the change in residential population less the supplementary valuations percentage or zero. Councils with negative population growth will have a population factor of zero, ensuring no council would receive a lower increase in general income, relative to a rate peg calculated using the LGCI and productivity factor, under our methodology. Councils that have recovered more from supplementary valuations than is required to maintain per capita general income as their population grows will also have a population factor of zero. The population factor will be calculated using the following formula:

$$Population\ factor = \max(0, change\ in\ population - supplementary\ valuations\ percentage)$$

Change in population for 2022–23:

We will publish the change in population for each council on our website. The change in population will be calculated using the estimated residential population (ERP) for 2019 and 2020 published by the Australian Bureau of Statistics (ABS).[67] This is the most up to date ABS population data.

The calculation is shown in the following formula:

$$change\ in\ population = \max\left(0, \frac{ERP\ 2020}{ERP\ 2019} - 1\right)$$

Each year we will update the formula. For example, for the 2023-24 rate peg methodology we will calculate the change in population using ABS data for 2020 and 2021.

Supplementary valuations percentage for 2022–23:

We will publish the supplementary valuations percentage for each council on our website. The calculation is shown in the following formula:

$$supplementary\ valuations\ percentage = \max\left(0, \frac{supplementary\ valuations}{notional\ general\ income\ yield}\right)$$

In this formula:

supplementary valuations means the total value of adjustments to a council's general income for 2019-20 that the council made under paragraphs 509(2)(b) and (c) of the *Local Government Act 1993* (LG Act). This is the amount recorded as 'plus/minus adjustment' for 2019-20 in each council's 'Special schedule – Permissible income for general rates' for 2019-20 submitted to the Office of Local Government (OLG) in accordance with OLG's *Local Government Code of Accounting Practice and Financial Reporting*.[68]

notional general income yield means the general income of the council for 2019-20 prior to adjustment under paragraphs 509(2)(b) and (c) of the LG Act.

Each year we will update the formula. The supplementary valuations percentage will be calculated based on supplementary valuations revenue and notional general income yield for the same year as the ERP data.

True-up for rate peg in 2024-25 following census and, subsequently, with a materiality threshold

We propose to provide a true-up for all councils when the next census data is released. This will impact the rate peg for 2024-25, ensuring all councils are re-based to a consistent point to reflect actual growth.

The true-up in 2024-25 would apply to all councils. For councils that would receive a lower increase in general income due to the true-up, we propose to adjust the 2024-25 population factor, but not adjust the population factor below zero.

For subsequent census releases going forward we will apply a 'true-up' for councils only when the difference between the estimated residential population and actual census data is greater than 5%.

Explanatory notes

Important features of the methodology include:

- The population factor reflects a linear relationship between population growth and council costs.
- The change in population for each council is calculated using ABS estimated residential population data.
- Councils with negative growth will have a population factor of zero. Such councils will receive a rate peg that is determined in the same manner as it is now.
- The supplementary valuations percentage will be calculated using supplementary valuations revenue and notional general income yield for the same time period as the ERP data.
- If a council's supplementary valuations percentage exceeds its change in population, indicating the council has recovered more revenue through supplementary valuations than is necessary to maintain per capita general income, the population factor will be zero.

The methodology does not change the operation of the supplementary valuation process under the *Valuation of Land Act 1916* or the calculation of notional general income under section 509(2) of the LG Act. Councils will still calculate their notional general income in the same way as they do now. The rate peg methodology will, however, account for the value of supplementary valuations when determining the population factor to be applied.

B.2 We recommend adjusting the rate peg for population growth

This section outlines other factors and issues we considered before reaching our recommended methodology, and the reasons we have not included some other factors.

B.2.1 We recommend measuring the change in population rather than dwellings

We considered whether we should include a population factor based on a change in the number of dwellings, the number of rateable dwellings, or residential population. Our research indicates both population and rateable dwellings have a relatively linear relationship with growth in costs. However, we prefer a measure based on population growth because councils that experience population growth without growth in rateable properties would be unfairly disadvantaged.

B.2.2 We recommend measuring the change in residential population rather than service population

Many submissions to our Issues Paper and Draft Report highlighted the costs incurred by councils when their serviceable population is higher than their residential population.[69] Examples include councils that:

- attract large tourist populations, including day visitors and short-term holiday makers[70]
- act as regional business or cultural hubs. Some areas of NSW, such as Parramatta CBD and the City of Sydney CBD see large increases in population during parts of the day, which increase costs to council[71]
- provide services to workers who work in one council area, but live and pay rates in a different council area.[72]

We considered whether we should include service populations within a population factor, and concluded the following:

- It is challenging to accurately measure service populations.
- There is some benefit to business ratepayers from a larger serviceable population. However, ultimately ratepayers across all rating categories, including residential ratepayers, could pay higher rates if our methodology accounted for changes in service populations.
- Collecting revenue from service populations is better achieved through user pays approaches, although councils can only use user charge approaches for some services such as car parking.
- Councils can apply to IPART for a special variation if they require additional revenue to accommodate their service populations.

B.2.3 We recommend using ABS data to measure population growth

We considered whether to base our population factor on ABS data or the Department of Planning, Industry and Environment's (DPIE's) population projections. We favour using the ABS Estimated Residential Population data because it is:

- publicly available
- easy to understand
- more accurate than a projection because it is a backward-looking estimate.

There was support in submissions to our Issues Paper, Draft Report and at council workshops for using population projections to measure population growth.[73] However, there were also councils who raised concerns with the accuracy of DPIE's population projections. Most submissions to our Draft Report supported the use of ABS data in the methodology.[74]

Our analysis found the DPIE population projections were a good estimate of future population growth. Over the past 5 years, at the state level, the projections have been a good predictor of actual population growth. Our analysis also found that the projections were relatively accurate for most councils in NSW.

We found that using both historical estimates and forward-looking projections maintain the relationship between council revenue and the costs of population growth over time.

We tested our methodology using both ABS and DPIE data over 5 years and found that using ABS data produced better results and reduced the need to use a 'true-up' in the methodology to maintain accuracy over time.

Table B.2 compares the accuracy of the ABS and DPIE data over the 5-years leading up to the 2016 Census. It shows that the ABS data provides a better population estimate than the DPIE projection.

Table B.2 Number of councils by 2011-16 population estimation error

Estimation error	ABS ERP	DPIE Projection
Overestimated growth by more than 5%	6	9
Overestimated growth by 2.5% to 5%	19	17
Estimation within +/- 2.5%	96	78
Underestimated growth by 2.5% to 5%	5	18
Underestimated growth by more than 5%	3	7
Total number of councils	**129**	**129**

Source: IPART analysis., ABS, National, state and territory population, December 2020; DPIE, NSW population projections, December 2019.

We also considered using third party population projections, particularly those used by councils. Individual councils' forecast series are based on assumptions agreed by each individual council and the third-party provider. The relationship is not independent, and we prefer an estimate that is derived at 'arm's length' from councils' processes.

B.2.4 Our methodology maintains councils' total per capita general income over time

Our recommended methodology maintains total per capita general income over time, instead of only the portion of general income paid by residential ratepayers.

Several submissions to our Draft Report raised concerns that growth from business and other non-residential activity would not be measured by a methodology that relied only on residential population growth.[75]

In some instances, a large portion of council rates income is paid by other ratings categories such as business or mining, instead of residential ratepayers. However, for most councils, residential rates make up most of their rates income. We prefer an approach that varies total general income as:

- Population growth brings growth in businesses in a council area, and there is no mechanism to increase rates income for growth in the number of businesses.
- The current rate peg methodology applies to councils' total general income.

B.2.5 We will true-up the rate peg with census data based on a materiality threshold

ABS population data, although backward looking, is an estimate. The data is updated to reflect actual growth after the census every 5 years. We consider it would be appropriate to rebase the population factor in the rate peg every 5 years following the census to reflect actual growth.

We will provide a true-up for all councils when the next census data is released. This will impact the rate peg for 2024-25 when the next census data is reflected in the ERP data from 2023.

We prefer this position because of the uncertainty with the ABS's population estimates due to the impact of COVID-19. The true-up in 2024-25 would apply to all councils. For councils that would receive a lower increase in general income due to the true-up, we propose to adjust the 2024-25 population factor, but not adjust the population factor below zero.

Going forward we propose to only apply a 'true-up' for councils that have foregone more than 5% of their population estimate percentage. This approach will maintain certainty and not disadvantage councils with small populations that are susceptible to errors in EPR data.

We found the census data does result in a rebasing of past population estimates, although for many councils the impact is likely to be minimal as most councils have an estimation error of less than 2.5% (i.e. 0.5% per year) for the period 2011-16, when comparing it with actual 2016 Census population data.

Based on data from the 2016 Census, this approach impacted 3 councils, where the ERP data underestimated actual growth by more than 5%.

In council submissions to our Draft Report, 10 council submissions supported and 15 expressed qualified support for our proposal for a true–up of population data after each census. Two submissions opposed a true–up for reasons of simplicity.[76] Submissions stated:

- support provided if rebasing does not adjust for ABS over-estimates (i.e. a 'claw-back' of previous increases), that is, no negative true–up adjustments[77]
- a cap should be applied to increases (e.g. 8%) above which community consultation should occur.[78]

Of the 20 council submissions that addressed a materiality threshold in a true–up process, 7 submissions supported, and 13 expressed qualified support. Issues raised in these submissions include:

- a threshold should be introduced as part of rebasing, not as an alternative[79]
- relying on estimates only will be self-correcting (i.e. 'self true-up') over time[80]
- a materiality threshold should consider the impacts on a case-by-case basis.[81]

B.2.6 Census true-up methodology

2024-25 rate peg true-up

The population factors we release as part of the 2024-25 rate peg will incorporate a true-up to reflect councils' actual population growth. For the 2024-25 rate peg, this true-up will be done for all councils and may impact the level of general income councils can collect.

As an example, say a council starts with a notional general income for 2021-22 of $100, if the population factor in 2022-23 is 1%, its maximum general income for the year will be $101. In 2023-24 say the population factor is again 1%, then the maximum general income will be $102.01.

If the census population data, which is released in time for the 2024-25 rate peg shows that the population factor should have been 2% for both 2022-23 and 2023-24, then we will correct for this in the 2024-25 rate peg. In the table below it shows that although the population grew by 2% in 2024-25, the population factor needs to be 4.11% to correct, or true-up, this council's general income to the level it should be, based on the actual population data. The blue highlighted cells show the population factor that will apply in each year's rate peg calculation, assuming there are no other impacts (see notes section).

	2022-23	2023-24	2024-25
Notional general income for previous year[e]	100	101.00	102.01
Estimated population factor[f] (ABS ERP)	1%	1%	
Maximum general income	101.00	102.01	106.12
Actual population factor (census data)	2%	2%	2%
True-up population factor			4.11%

If the actual population data shows a council has received a larger increase from the ERP data over the previous years, then the true-up population factor will be adjusted but will not go below zero. In this case the council will still receive the other components of the rate peg, including the increase based on the Local Government Cost Index.

We will provide further information and explanatory notes when we release the 2024-25 rate peg to explain our calculations.

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[e] Notional general income for the previous year would ordinarily be determined by adjusting the general income for the previous year by valuations in land, supplementary valuations and estimates of increases in land value in accordance with section 509(2) of the *Local Government Act 1993*. For simplicity we have assumed that these adjustments are zero and the notional general income for the previous year is the same as the maximum general income for that year.

[f] For the purposes of simplicity for this example, we have not included the components of the rate peg calculated using the Local Government Cost Index and productivity factor.

Future rate peg true-ups

Going forward after 2025-26, we will undertake a true-up using census data on an exception basis. The true-up will follow the same methodology outlined above, but only impact councils that have forgone more than 5% of their population factor between census years. If the true-up population factor is less than 5%, then the council's population factor will be based on the ABS ERP data for that year.

B.2.7 We recommend not setting a minimum threshold before applying a population factor

We considered whether we should apply a minimum threshold before applying a population factor. We found:

- councils' costs increase with population growth regardless of whether the growth is relatively small
- setting a minimum threshold is unnecessary because our proposed formula is relatively simple and easy to implement.

Most submissions to our Issues Paper and Draft Report agreed with an approach that did not set a minimum threshold.

B.2.8 There are other sources of funding for councils experiencing high population growth

Our research of council costs found:

- a mostly linear relationship between the increase in population growth and the increase in council costs
- high growth councils do appear to have higher costs, but these are mostly capital costs that are paid for by developers.

Adding additional complexity for high growth councils may be unnecessary. We considered whether to apply a higher population factor to high growth councils, but as this would increase rates income for existing ratepayers, it would be inequitable.

There is a range of existing processes in place to fund high growth councils, including state and federal government infrastructure funding and grants. State and federal government grants and infrastructure funding (such as the state government's Special Infrastructure Contributions) should remain targeted to provide some additional funding for high growth councils.

B.2.9 We do not propose to adjust the population factor for socioeconomic disadvantage

Submissions to our Issues Paper suggested our methodology should incorporate a measure of socioeconomic disadvantage – such as the SEIFA Index.[82] Councils are responsible for levying rates and in doing so consider the capacity or willingness of ratepayers to pay.

If we proposed an adjustment for socioeconomic disadvantage, then the councils with the most vulnerable ratepayers would receive less additional revenue. We consider that issues of social and economic disadvantage and capacity to pay, should be dealt with through state and federal government initiatives such as grants or other funding mechanisms. Our approach does not consider a measure of socioeconomic disadvantage.

B.2.10 Our methodology applies a growth factor to each council

In our Issues Paper we asked stakeholders if they thought we should set a population growth factor for each council, or for groups of councils with similar characteristics. Our Terms of Reference also asked us to consider this matter.

Most submissions to our Issues Paper favoured an approach that used a different population factor for each council.[83] Our proposed methodology is simple for councils to execute, and it is easy for us to calculate a population factor based on an agreed approach.

Applying a population factor to each council will result in a more equitable and accurate outcome. We see no need to apply a population factor to groups of councils.

B.3 The rate peg formula

We also considered how best to structure and apply a population growth factor in the rate peg. The current rate peg formula is:

$$Rate\ peg = \Delta LGCI - productivity\ factor + other\ adjustments$$

Our recommended approach to implementing the reformed rate peg is:

$$Rate\ peg = \Delta LGCI - productivity\ factor + other\ adjustments + population\ factor$$

Each year, each council will have a population factor equal to the annual change in its residential population, adjusted for revenue received from supplementary valuations in the previous year.

The population factor is equal to the maximum of zero or the change in residential population less the supplementary valuations percentage. If a Council's population growth is negative (as measured by the ABS data) the population factor would be zero.

This approach reduces the lag between when population growth is counted and when the change in the LGCI is applied.

B.4 Council's rating structure determines who pays for population growth

As part of our review, we considered if we could implement a population factor in the rate peg and ensure the additional revenue that councils receive is paid for by new ratepayers. We also considered whether protections were needed for existing ratepayers, or if we should recommend changes to the LG Act to provide councils with more flexibility when setting rates to ensure new ratepayers pay their fair share of rates revenue.

Our review found the following:

- Although the change to the rate peg is to account for population growth, it is up to councils to set rates, and it is unlikely that all the additional revenue councils receive will be paid for by new ratepayers.
- The structure of rates and the type of development that occurs with population growth will ultimately determine how much new ratepayers pay.
- Existing ratepayers are likely to pay higher rates in instances where population growth is not accompanied by an increase in rateable properties.
- Existing ratepayers are likely to pay higher rates in areas experiencing infill development because the ratings system is based on the unimproved value of land.
- The changes to rating subcategories made by the *Local Government Amendment Act 2021* will provide some additional flexibility for councils to set rates to ensure new ratepayers pay their fair share. For residential subcategories, the amendments are most likely to be used by councils with greenfield developments, which will be more easily defined as distinct residential areas with significant differences in access to, demand for, or costs of providing, service or infrastructure compared with other parts of the local government area.

Identifying whether new or existing ratepayers should pay for increased costs caused by population growth is difficult as there is no definition of 'new ratepayers'. Population growth mainly occurs as new residents move into an LGA. These new residents can be considered 'new ratepayers'. However no clear demarcation exists as to when a 'new ratepayer' may be considered an 'existing ratepayer'. Definitions of new and existing ratepayers are further complicated because existing ratepayers may also use facilities and infrastructure that are built or enhanced to service increased demand from new ratepayers.

B.4.1 No additional protections are required

Our analysis found that the share of additional revenue that is split between new and existing ratepayers will vary from council to council. However, in most instances, new ratepayers will pay for most of the additional rates revenue associated with population growth. How much new ratepayers will pay for growth will depend on several factors. These factors include the type of growth or dwellings being built, the demographic of new ratepayers, and how councils choose to allocate the rate peg increase across their rating categories and subcategories.

We are not recommending additional protections for existing ratepayers, because most of the costs of growth will be paid by new ratepayers. If councils were only able to obtain revenue from new ratepayers, there would be a shortfall in revenue to meet the costs of growth, which would likely result in more applications for special variations.

Further, the current system results in councils coming to IPART for a special variation, which if approved impacts all ratepayers in any case. Existing ratepayers will also likely benefit from improvements to services and infrastructure to service population growth.

The current ratings system presents 2 key barriers which reduce efficiency, including:

- the use of unimproved land values instead of improved land values
- non-rateability and reduced rateability of some types of development or land uses. Examples include:
  - secondary dwellings or granny flats, which increase population but do not increase rates income
  - some types of community housing or other housing, which do not pay rates
  - apartment buildings with a single owner, which only pay rates once and not for each individual apartment.

We found new ratepayers will pay a higher proportion of the costs of population growth when minimum rates and base rates are higher.

B.4.2 Who will pay for growth – worked examples

As outlined in Appendix A, the growth in general income that results from supplementary valuations is determined by applying a council's current rating structure (i.e. *ad valorem* and fixed charges across categories) to:

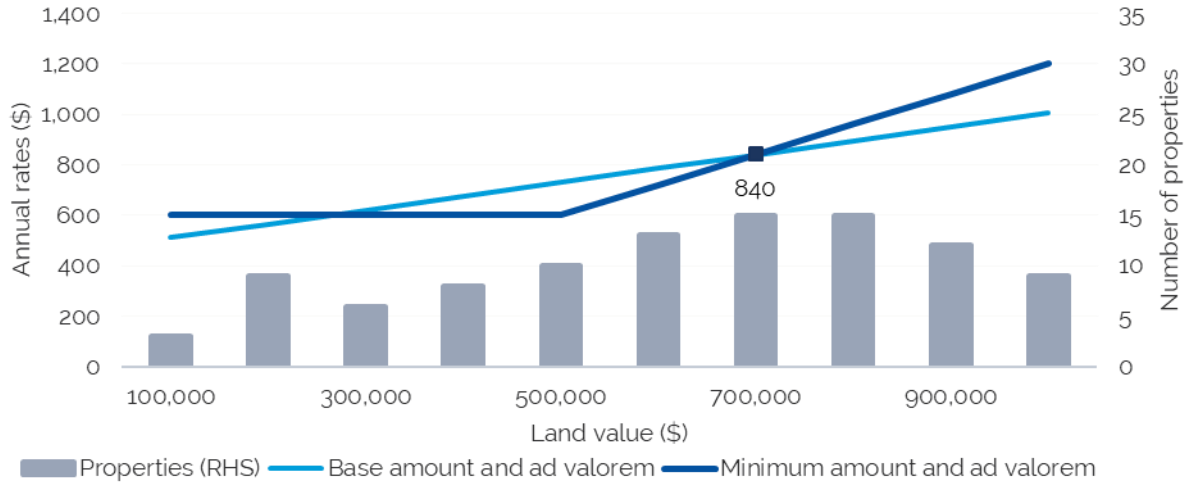
- the new value of the rezoned land (and to a different ratings category, if applicable), and/or
- the newly rateable properties.

The newly rateable properties will pay rates based on the council's ratings structure, which must comply with the LG Act. That is, rates may comprise either:

- a variable *ad valorem* amount, which may be subject to a fixed minimum amount, or
- a fixed base amount to which an *ad valorem* amount is added.

Figure B.1 shows the different rate structures councils can use to collect rates income. The light blue line represents a ratings structure using a base amount, while the dark blue line shows a rating structure using a minimum amount. The grey bars represent all the rateable properties in a council area.

Figure B.1 Comparison of base and minimum amount rate structures



Note: In this example there are 100 rateable properties. A property's position in the distribution, which is based on its land value, determines the annual rates the property will pay, based on how rates are structured.

In this example, a property with an unimproved land value of $700,000 will pay $840 in rates, regardless of whether the council uses a minimum rate or a base rate. The total rates revenue in this example, which is the sum of the last column in **Table B.3** is $81,720, and the rates per property are $817.

Table B.3 shows the rates paid by properties based on their unimproved land value.

Table B.3 Comparison of base and minimum amounts

Land value ($)	$600 minimum and 0.12% ad valorem	$455 base and 0.055% ad valorem	Properties	Rate revenue (using minimum rate structure)
100,000	600	510	3	1800
200,000	600	565	9	5400
300,000	600	620	6	6000
400,000	600	675	8	4800
500,000	600	730	10	6000
600,000	720	785	13	9360
700,000	840	840	15	12,600
800,000	960	895	15	14,440
900,000	1080	950	12	12,960
1,000,000	1200	1005	9	10,800
Total			**100**	**81,720**

Infill development example

In inner metropolitan areas, development is mostly due to subdividing existing residential lots into dual-occupancy dwellings, multi-dwelling units or apartment buildings. **Figure B.2** and **Table B.4** show an example where infill development occurs. In this example, the property represented by the dark blue square in **Figure B.2** is subdivided into 4 new properties (the light blue square). We have simplified the example to show the impact of our methodology when a council uses a minimum rate structure.

Under the current rate pegging system, the council's total rates income will increase by $1440 from $81,720 to $83,160 (due to supplementary valuations), but the amount of rates revenue will fall on a per property basis from $817 to $807. Revenue falls per property because the existing property, which paid $960 in rates, is replaced by 4 properties that each pay the minimum rate, which is $600.

Under our recommended methodology, councils would at least maintain their per capita rates. If the minimum rate remains unchanged, then the slope of the *ad valorem* section of the line becomes slightly steeper, meaning existing ratepayers pay more (the blue dashed line).

How much new properties pay in rates will depend on their unimproved land value and the council's rating structure. In this example, of the $2452 of additional revenue the council will receive from population growth, $1440 (59%) will be paid by new ratepayers and $1012 (41%) will be paid by existing ratepayers.

Figure B.2 Example of infill development impact on residential rates per property

Note: In this example the blue property paying approximately $960 per annum in rates, is replaced with 4 properties each paying $600. The 3 additional (one property is replaced by four) properties' rates are below the median rate paid for all the properties in the LGA. If the rate structure remains unchanged, it will lower the residential rate per property income for the council.

Table B.4 Infill development example

Land value ($)	Rates payable (current)	Rates payable (proposed)	Properties	Rate revenue (current)	Rate revenue (proposed)
100,000	600	600	7 (+4)	4200	4200
200,000	600	600	9	5400	5400
300,000	600	600	6	3600	3600
400,000	600	600	8	4800	4800
500,000	600	609	10	6000	6093
600,000	720	731	13	9360	9505
700,000	840	853	15	12,600	12,796
800,000	960	975	14 (-1)	13,440	13,649
900,000	1080	1097	12	12,960	13,161
1,000,000	1200	1219	9	10,800	10,968
Total			**103**	**83,160**	**84,172**

Greenfield development example

In outer metropolitan, rural and regional areas, development is mostly due to subdivision of existing farmland or other non-residential zones into residentially zoned land with detached dwellings. **Figure B.3** and **Table B.5** show an example where greenfield development occurs and 10 new properties are added (the light blue squares). This example ignores the foregone revenue from the pre-residential zone. We have simplified the example to show the impacts when a council uses a minimum rate structure.

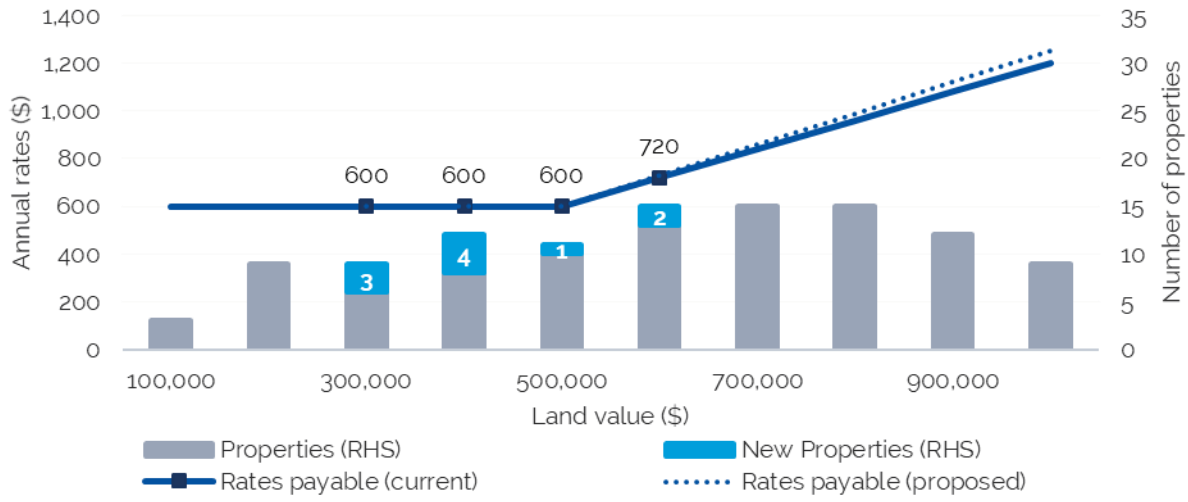
Under the current rate pegging system, the council's total rates income will increase by $6240 from $81,720 to $87,960 (due to supplementary valuations), but the amount of rates revenue will fall on a per property basis from $817 to $800. Revenue falls per property because the new properties are below the median rates paid in the area.

Under our recommended methodology, councils would at least maintain their per capita rates. If the minimum rate remains unchanged, then the slope of the *ad valorem* section of the line becomes slightly steeper, meaning existing ratepayers pay more (the blue dashed line).

How much new properties pay in rates will depend on their unimproved land value and the council's rating structure. In this example, of the $8,172 of additional revenue the council will receive from population growth under the proposed methodology, $6,298 (77%) will be paid by new ratepayers and $1,874 (23%) will be paid by existing ratepayers.

The $58 difference between the $6,240 from the current rate peg system and the amount new ratepayers pay under our proposed approach ($6,298) is because two properties are subject to an ad valorem amount which increased slightly.

Figure B.3 Example of greenfield development impact on residential rates per property



Note: In this example the 10 new properties are mostly paying the $600 minimum rate. Two of the properties pay more because their new unimproved land value is approximately $600,000. The 10 additional properties' rates are close to, but below, the median rate paid for all the properties. If the rate structure remains unchanged, it will lower the residential rate per property income for the council. The *ad valorem* part of the dark blue line will get only slightly steeper in this example.

Source: IPART analysis.

Table B.5 Greenfield development example

Land value ($)	Rates payable (current)	Rates payable (proposed)	Properties	Rate revenue (current)	Rate revenue (proposed)
100,000	600	600	3	1800	1800
200,000	600	600	9	3600	5400
300,000	600	600	9 (+3)	5400	5400
400,000	600	600	12 (+4)	7200	7200
500,000	600	617	11 (+1)	6600	6787
600,000	720	740	15 (+2)	10,800	11,106
700,000	840	864	15	12,600	12,957
800,000	960	987	15	14,400	14,808
900,000	1080	1111	12	12,960	13,327
1,000,000	1200	1234	9	10,800	11,106
Total			**110**	**87,960**	**89,892**

C The context of our review

This Appendix sets out additional background information including:

- the context for this review within the wider reforms to the developer contributions system
- statistics highlighting how population growth is occurring
- more information on key concepts such as the NSW ratings system.

C.1 The current ratings system does not adequately compensate councils for population growth

As local communities grow, councils need to provide infrastructure and services to new residents and businesses. Councils source revenue in a variety of ways:

- property rates
- sale of goods and services, which includes fees and charges for services such as waste management, water and wastewater, recreation and building approvals
- grants from the Australian Government administered through the NSW Grants Commission, and other grants such as capital grants
- other revenue, including levying developer contributions
- interest income.

In NSW, the amount of revenue councils can raise through rates is limited by the rate peg and increases in rates from supplementary valuations due to changes in land value. However, this additional revenue is insufficient to maintain per capita rates for many councils with growing populations.

Councils can levy developer contributions through development contribution plans to fund development-contingent infrastructure. But this additional revenue does not cover the ongoing operating or maintenance costs of infrastructure. The same is true of grants income.

With limited avenues to raise discretionary income from alternative sources, to fund new services and infrastructure, some councils applied to IPART for a 'special variation' so their general income can rise in line with their population growth.

Adjusting the rate peg to account for population growth will allow councils to provide services for new residents and maintain delivery standards for their communities.

C.1.1 The NSW Government has committed to reforming the rate peg

The NSW Government committed to allowing councils to align their income with population growth in its June 2020 response to a recommendation in IPART's 2016 review of the local government rating system. The NSW Productivity Commission made a similar recommendation to allow councils' general income to increase with population in its 2020 review of infrastructure contributions in NSW.

C.1.2 The rate peg limits how fast rates can rise

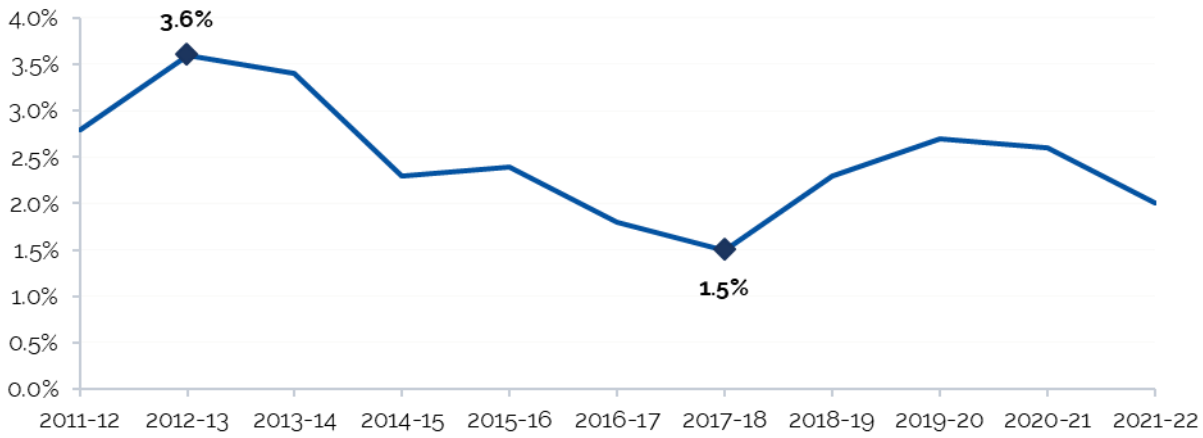
The rate peg is the maximum percentage by which a council may increase its general income for the year. General income mainly comprises rates revenue, but also includes certain annual user charges. It excludes stormwater and waste charges, and water and wastewater charges.

The rate peg applies to total revenue collected from these sources rather than to individual rates. Councils have discretion to determine how to allocate a rate peg increase between different ratepayer categories, so long as the total increase in revenue does not exceed the maximum permitted by the rate peg. For example, a council could decide to increase business rates by more than residential rates.

IPART is responsible for setting the rate peg each year.[9] IPART has previously set one rate peg applicable to all NSW councils. Following recent changes to the *Local Government Act 1993* (LG Act), IPART may now specify different rate pegs for different councils and specify a methodology for calculating the rate peg rather than specifying a percentage. The intent is to allow for councils to increase their income in line with the population growth within their communities.

The average rate peg set by IPART has been around 2.5%. **Figure C.1** charts the rate peg over the period 2011–12 to 2021–22. The highest rate peg was 3.6% due to the introduction of the carbon price, and the lowest rate peg, attributed to a low inflationary environment, was 1.5%.

Figure C.1 Changes in the rate peg, 2011–12 to 2021–22



Source: IPART website: Rate peg for NSW councils for 2021-22.

The rate peg is primarily determined by measuring changes in IPART's local government cost index (LGCI). The LGCI reflects the increase in costs experienced by the average council. In calculating the annual rate peg, IPART may adjust for improvements in productivity in addition to the LGCI. In some years we make additional adjustments; for example, the rate peg for 2021–22 included an adjustment for the costs of the 2021 local government elections.

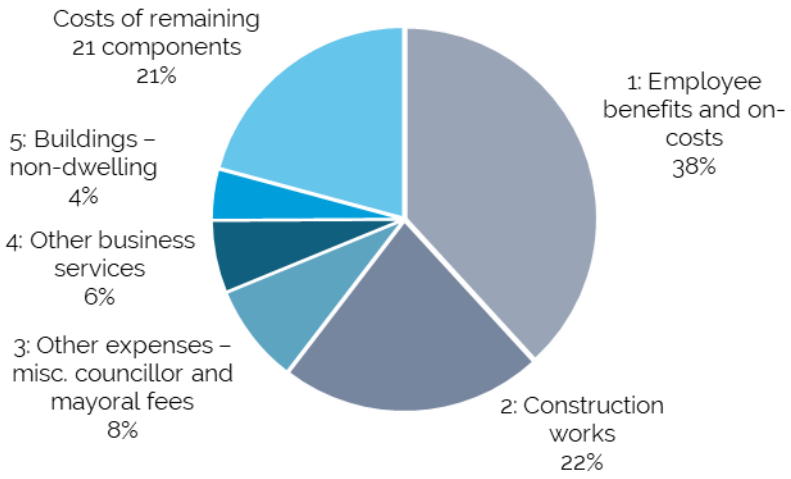
[9] The Minister for Local Government has delegated this function to IPART: Delegation under section 744 of the *Local Government Act 1993*, dated 6 September 2010.

The LGCI includes operating and capital cost items. While the proportions vary from year to year, operating costs are around 70% and capital costs around 30% of the total costs.[84]

The LGCI has 26 components, with the 5 largest components comprising 79% of the total costs, as illustrated in **Figure C.2**.

While the rate peg accommodates changes in the price of services faced by an average council, it does not include changes in the volume of services required. This volume is likely to increase for councils experiencing population growth.[85] Since councils have limited alternative sources of discretionary income, rate pegging limits their overall ability to raise revenue. If overall land values rise, or the number of ratepayers increases, *ad valorem* rates must fall so total revenue does not exceed the approved increase. Within the rate peg, councils have discretion over the distribution of rates between the categories of rateable properties (i.e. farmland, residential, mining and business).

Figure C.2 Local government cost index components



Source: IPART website: Rate peg for NSW councils for 2021–22.

Additional information on the rate peg can be found on IPART's website at: The Rate Peg.

C.1.3 The developer contributions system is being reformed

New development may create the need for additional local infrastructure, such as parks, community facilities, roads and stormwater drainage. This additional infrastructure can be funded through developer contributions.

Councils can collect developer contributions via a section 7.11 contributions plan, which specifies the link between the new development and the increased demand for infrastructure.[h] Alternatively, councils may levy up to 1% (in most areas) of the estimated cost of new development under a section 7.12 contributions plan to fund new infrastructure.[i,86]

Developer contributions must be used for the purpose for which they were collected, and within a reasonable time. These contributions provide for base-level infrastructure to support development and meet the infrastructure needs of the growing population. However, they do not provide for the operating and maintenance costs of this infrastructure or increases in the volume of services demanded by the additional population.

In December 2020, the NSW Productivity Commissioner completed a review of the infrastructure contributions system in NSW. The NSW Government accepted all 29 recommendations from this review and has developed a roadmap to implement reform to the system.[87]

C.1.4 Councils can ask IPART for a special variation

If a council seeks to increase its general income by more than the rate peg percentage, it must obtain approval for a 'special variation' from IPART. IPART assesses these applications against criteria established by the NSW Office of Local Government.[88] Councils must demonstrate the need for the additional revenue, show evidence of community consultation, and assess the impact on affected ratepayers.

Councils can use this additional income to fund the costs of population growth, and for other purposes such as infrastructure renewal.

C.1.5 Supplementary valuations can impact council income

Councils also increase their general income outside the rate peg where the Valuer General issues supplementary valuations that increase land value. Supplementary valuations are issued outside the usual 3 to 4-year general valuation cycle when changes to property are recorded on the Register of Land Values. Supplementary valuations can be triggered in various circumstances, in particular:

- land rezoning (e.g. the zoning of a property changing from farmland to residential or low to high density residential) on request by council
- development that contains a subdivision where a new rateable property is created.

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[h] This is known as 'development-contingent infrastructure'.

[i] This is lower than what would be collected under a section 7.11 plan. The Productivity Commissioner's review recommended an increase to the maximum rate for section 7.12 levies, equivalent to 3% of residential development, which would enable more councils to benefit from the simpler requirements of the section 7.12 levy.

The change in general income resulting from supplementary valuations is determined by applying a council's current rating structure (i.e. base rates and/or *ad valorem*) for:

- re-zonings – the difference between the new and old valuations for the rateable property is added or subtracted from the rate base
- subdivision – rates for the new rateable properties are charged based on the council's rating structure, and the previous property's rates are extinguished.

Supplementary valuations can result in land values increasing or decreasing, impacting the rates revenue received for the affected properties. Councils' general income can be reduced where supplementary valuations result in a reduction in rate income.

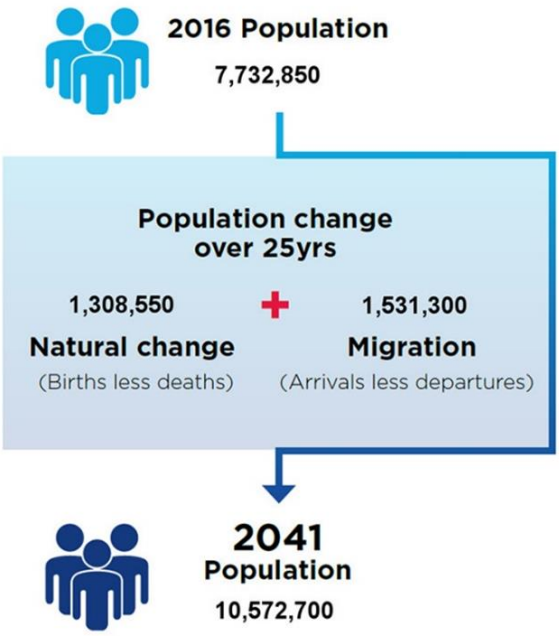
Supplementary valuations do not increase council income where they are associated with development of non-rateable properties. This can include, for example, development on land owned by a public benevolent institution or public charity. Supplementary valuations are not issued for development of secondary dwellings unless the unimproved value of the land changes.

Recent analysis in the Valuer General's review of the impact of rezoning potentiality on land values showed increases in land values occur before rezoning all the way through to the final subdivision of the development.[89] Timing implications for rates revenue associated with the supplementary valuation process therefore exist, because supplementary valuations can occur at both rezoning and sub-division.

C.2 The NSW population will continue to grow

The NSW Government estimates the NSW population will grow from 7.7 million in 2016 to 10.6 million in 2041 (**Figure C.3**).

Figure C.3 NSW population projections



Source: Department of Planning, Industry and Environment, Full NSW population projections.

Between 2014 and 2019, NSW's population grew by 1.5% per year on average.[90] Some local government areas (LGAs) experienced higher growth during that period, including Camden at 8.1%, Sydney at 3.8%, and Strathfield and Parramatta at 3.1% per year.[91]

The Department of Planning, Industry and Environment (DPIE) projects the NSW population will grow by 1.4% per year over the next 5 years, reaching 9 million by 2026.[92] Some LGAs are forecast to experience higher growth over that period, including Burwood at 3.8%, Camden at 3.7%, The Hills Shire at 3.6% and Strathfield at 3.3% per year.

Box C.1 What is population growth and how is it measured?

Population growth at the state level consists of 3 key elements: natural increase (births and deaths), net overseas migration, and net internal migration from other states and territories.

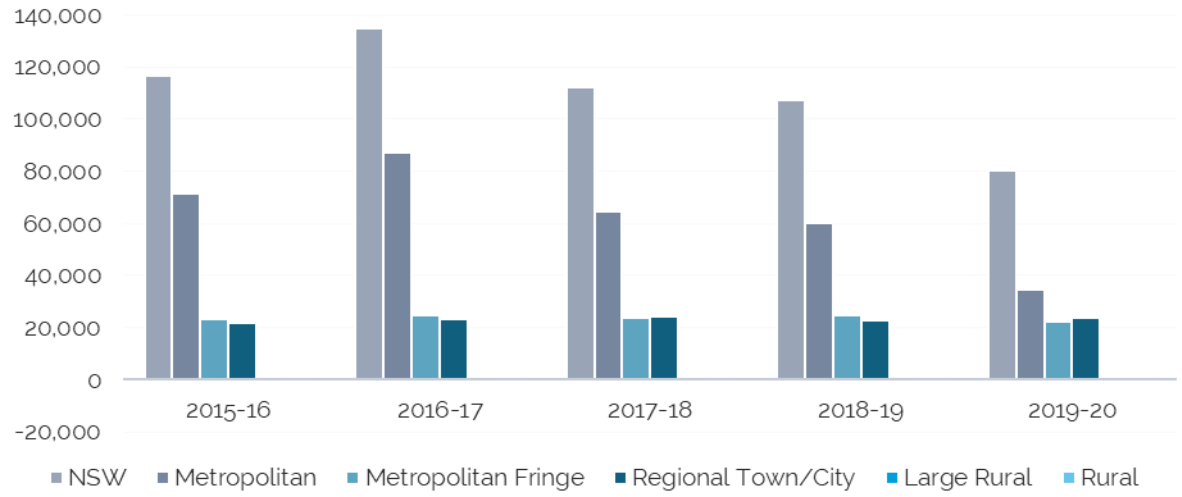
The Australian Bureau of Statistics publishes historical growth statistics at the national and state and territory levels, calculated as the yearly change in estimated resident population. Population estimates are based on the usual place of residence within Australia.

The most recent local government area growth statistics are for 30 June 2020, released in March 2021.

DPIE publishes projected growth in 5-year intervals to 2041. The most recent projection is from 2019, with the next update due in 2022.

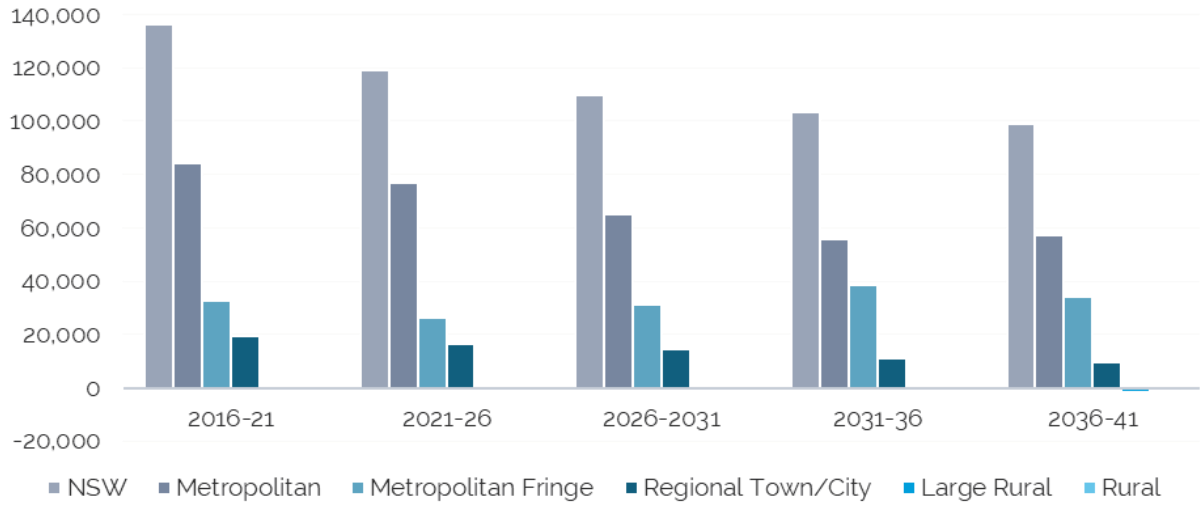
Figure C.4 and **Figure C.5** show historical and projected population growth for NSW.

Figure C.4 Historical population growth for NSW



a. the chart includes the aggregate projected population growth of large rural and rural councils, however the aggregate projected change was almost zero.
Source: ABS, Australian Demographic Statistics, cat. no. 3101.0, 18 March 2021 and IPART analysis.

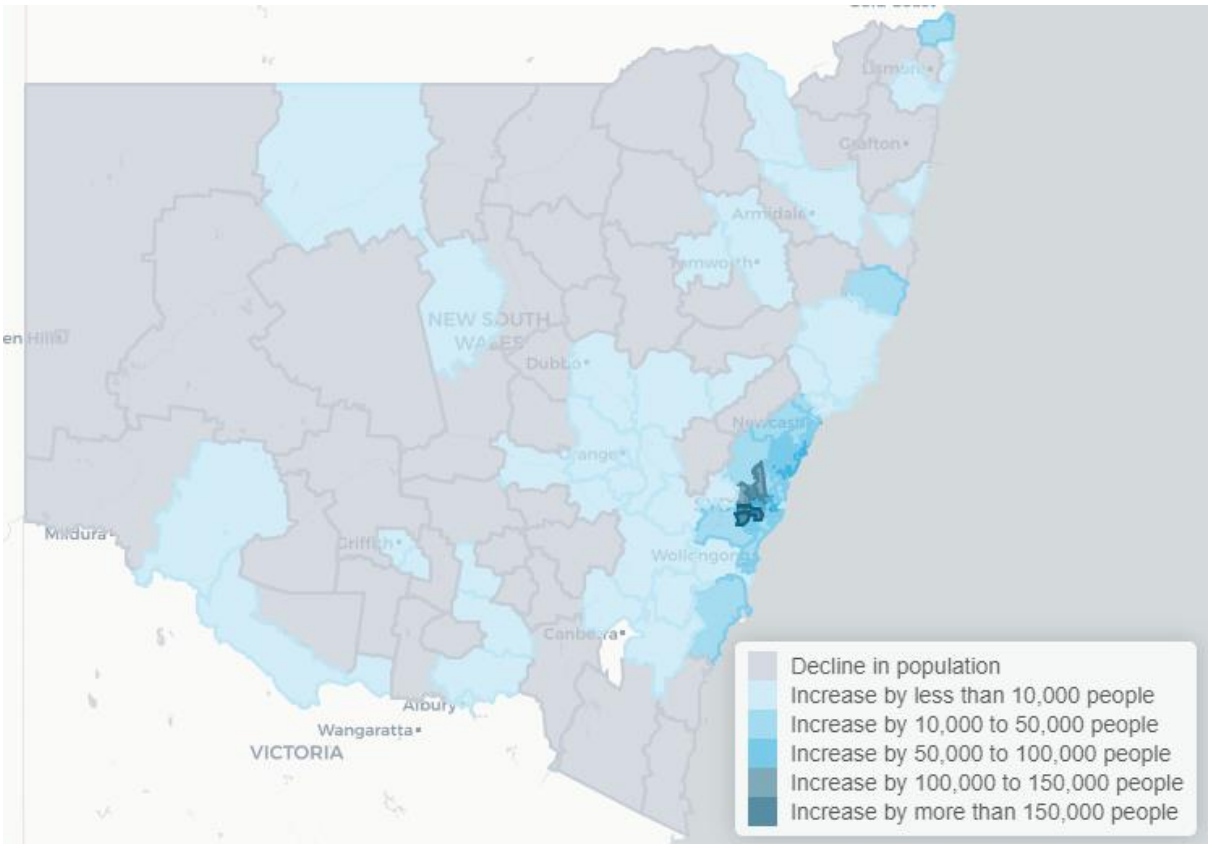
Figure C.5 Projected population growth for NSW



Source: NSW DPIE (December 2019) NSW population projections and IPART analysis.

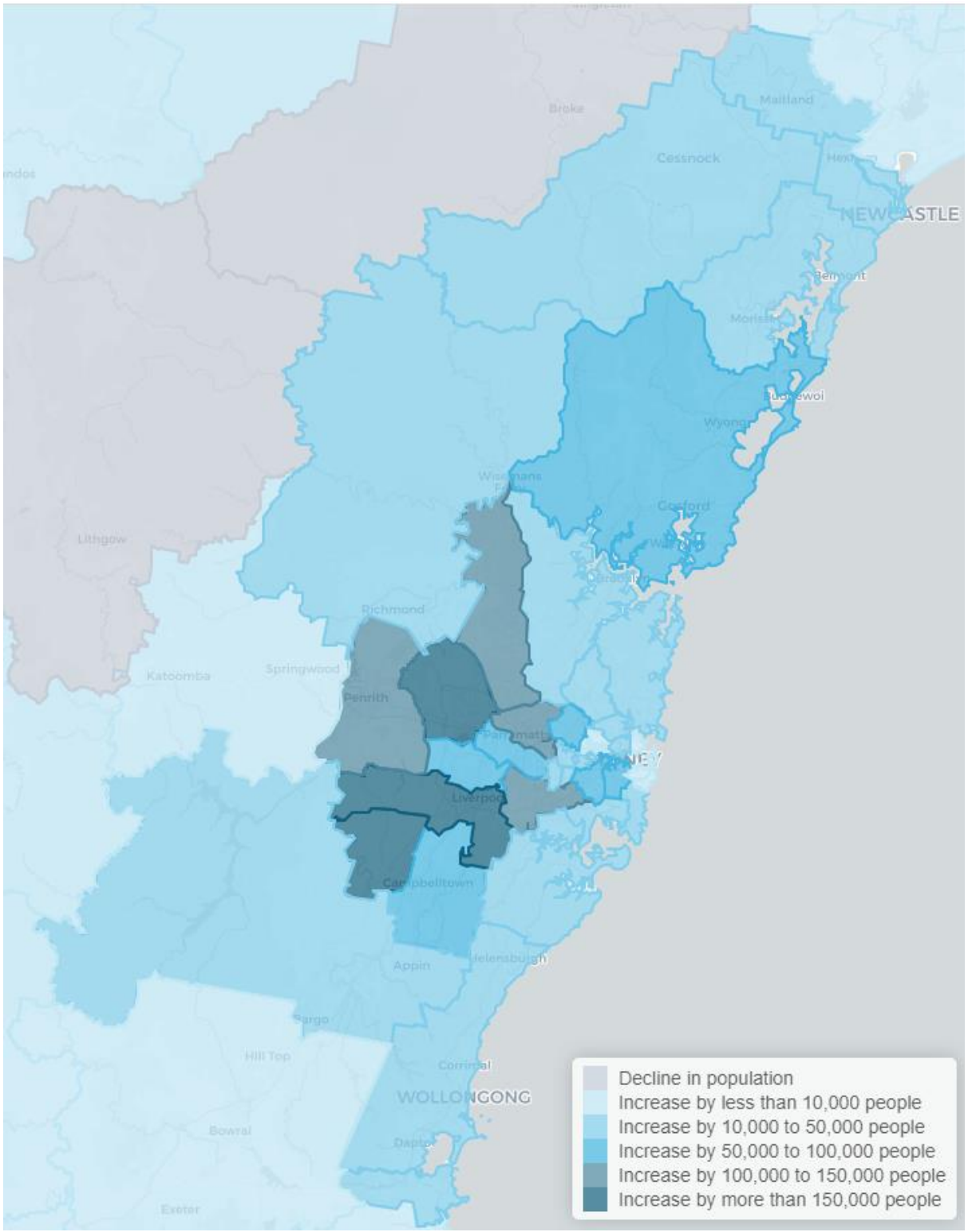
Figure C.6 and **Figure C.7** map the projected population growth for NSW and Sydney and surrounds.

Figure C.6 Projected population growth for NSW between 2021-41



Source: NSW DPIE (December 2019) NSW population projections and IPART analysis.

Figure C.7 Project population growth for Sydney and surrounds between 2021-41



Source: NSW DPIE (December 2019) NSW population projections and IPART analysis.

C.2.1 COVID-19 has impacted growth in 2020

The Australian Bureau of Statistics reported the NSW population grew by 1.0% in 2019–20, down from 1.3% in 2018–19,[93] and lower than DPIE's projected rate for 2019–20 of 1.7%.[94] In the 2020–21 Budget, the Centre for Population projected almost no growth in the NSW population in 2020–21 and 2021–22, with population growth expected to increase to 1.0% by 2023–24.[95]

DPIE cited in its 2020 population insights that events in NSW, other parts of Australia and globally are affecting population change in 2020.[96] Key factors include the continued drought, bushfires, the COVID-19 pandemic and the resulting economic recession.

Net overseas migration has been the largest contributor to population change in NSW in the past decade.[97] The Australian Government closed international borders in March 2020 in response to the COVID-19 pandemic, decreasing net overseas migration dramatically. The impact on population growth is expected to continue until borders reopen.[98] Factors including the rollout of the COVID-19 vaccine, the vaccine's effectiveness, and the speed of re-opening international borders will impact future population projections.

Submissions to our Issues Paper supported the trends seen in population estimates due to the fall in net overseas migration. However, submissions also highlighted the impact that inter and intra state migration was having on their LGA. This was particularly evident in submissions from regional councils which suggested their populations had been increasing over the past 18 months.[99]

C.3 The ratings system in NSW is determined by the LG Act

The LG Act determines how rates are calculated in NSW, as shown below

Rate Structure	Rating Categories	High Density Property
Rates = % of land value[a] (ad valorem rate) **OR** Base[b] + % of land value	Councils may levy different rates for different categories	Unimproved land value is split between apartments in multi-unit dwellings

a May be subject to a minimum rate

b The base amount cannot constitute more that 50% of the total rates in that rating category or subcategory.

Source: *Local Government Act 1993.*

C.3.2 Rate structure

Under the LG Act, councils determine the distribution of the rating burden between ratepayers. A council's rating structure can be either:

- an *ad valorem* amount (which may be subject to a minimum amount), or
- a base amount to which an *ad valorem* amount is added.

In NSW, an *ad valorem* amount is set as a proportion of the unimproved land value of the rateable property – that is, the value of the property without any buildings, houses or other capital investments. Councils can set a minimum amount that *ad valorem* properties can be charged to ensure all ratepayers contribute an equitable share.

A base amount, where applied, is a fixed charge that is levied equally against all rateable properties within a given rate category, or subcategory of land use, in addition to the *ad valorem* amount.

The proportion of revenue a council can generate from the *ad valorem* amount included in rates is not restricted. However:

- revenue generated from the base amount cannot exceed 50% of the total revenue from any particular rating category
- the minimum amount charged cannot exceed the statutory minimum amount,[j] unless approved by IPART.

Where the rateable property consists of multiple units, such as a block of apartments, a single land value is determined for the whole site. The assessed unimproved land value for an individual apartment is then calculated by dividing the total land value according to each apartment's allocation.

C.3.3 Rating categories

Councils can vary the way they calculate rates for different categories of property. For example, they can use a different percentage of the unimproved land value to calculate the *ad valorem* amounts, apply different minimum amounts, or add different base amounts. The four main rating categories are:

- residential
- business
- farmland
- mining.[k]

Councils may also determine subcategories within each of the 4 categories and vary the way they calculate rates for each subcategory. However, the degree of flexibility in determining rating subcategories under the LG Act varies across categories.

A range of land uses or land ownerships are also currently exempt from paying rates (or exempt from paying a portion of rates). These include, for example, national parks, charitable organisations and educational institutions.

[j] The 'statutory minimum amount' refers to the amount specified in the *Local Government (General) Regulation 2005* for the purposes of section 548(3)(a) of the *Local Government Act 1993*.

[k] The *Local Government Amendment Act 2021* provides for a new rating category for environmental land. The relevant provisions have not yet commenced.

C.3.4 Different types of rates

Two different rate types are included in a council's general income:

- Ordinary rates – Councils are required to make and levy an ordinary rate for each year on all rateable land in their area.
- Special rates – Councils have discretion to levy a special rate to meet the cost of any works, services, facilities or activities to be provided or undertaken in their area. Special rates can be levied on subgroups of ratepayers who benefit from, contribute to the need for, or have access to, the works, services, facilities or activities. For example, a special levy could be applied to all properties in a specific area or development where ratepayers will benefit from new services.

D Forecast increase in notional income by council

This appendix sets out the impact our proposed methodology would have had on councils over the past four years. The table is sorted by the total impact and notes the type of council.

The table shows that large metropolitan councils will benefit the most from the proposed methodology.

The first column of notional income shows the increase from positive supplementary valuation growth over 2017-18 to 2020-21. The second column of notional income shows the increase from additional growth that exceeded any special variations that applied over that 4-year period.

The increase in notional income from positive supplementary valuations growth (first column) benefits 107 councils and the total cumulative benefit is $365.3 million. The increase in notional income in the second column, which counts additional growth that exceeds existing special variations, benefits 96 councils and the total benefit is $287.0 million.

Our analysis is based on information from councils audited financial statements and follows our proposed methodology. In some instances, we have made assumptions about the appropriate supplementary valuation percentage when data was missing or incomplete.

Table D.1 Forecast increase in notional income by council (NSW)

Council	Type	Cumulative increase of notional income over 4 years - excluding SVs ($)	Cumulative increase of notional income over 4 years ($)	4-year population growth (%)
Sydney	Metropolitan	86,186,778	86,186,778	14.5
Parramatta	Metropolitan	24,474,371	24,474,371	12.8
Canterbury Bankstown	Metropolitan	12,860,052	12,860,052	5.7
Liverpool	Metropolitan	10,773,313	10,773,313	10.7
The Hills Shire	Metropolitan Fringe	10,282,199	10,282,199	11.4
Camden	Metropolitan Fringe	9,016,452	9,016,452	35.6
Willoughby	Metropolitan	8,738,053	8,738,053	8.7
Wollongong	Regional Town/City	8,070,791	8,070,791	4.8
Inner West	Metropolitan	9,481,310	7,988,815	5.4
Central Coast	Metropolitan Fringe	7,596,898	7,596,898	2.7
Fairfield	Metropolitan	7,135,217	7,135,217	4.3
Hornsby	Metropolitan Fringe	6,149,399	6,149,399	5.1
Northern Beaches	Metropolitan	9,952,509	5,486,767	4.2
Bayside	Metropolitan	12,422,798	5,455,331	11.6
Lane Cove	Metropolitan	4,987,946	4,987,946	11.6
Waverley	Metropolitan	4,729,436	4,729,436	5.3
Tweed	Regional Town/City	4,524,348	4,524,348	5.6
Campbelltown	Metropolitan Fringe	4,026,219	4,026,219	7.6
Woollahra	Metropolitan	3,757,883	3,757,883	4.2

Council	Type	Cumulative increase of notional income over 4 years - excluding SVs ($)	Cumulative increase of notional income over 4 years ($)	4-year population growth (%)
Randwick	Metropolitan	8,556,538	3,677,654	6.1
Georges River	Metropolitan	3,403,318	3,403,318	5.0
Blacktown	Metropolitan	3,355,249	3,355,249	10.1
Sutherland	Metropolitan	3,183,747	3,183,747	2.1
Ku-ring-gai	Metropolitan	4,264,676	2,878,572	5.6
Ryde	Metropolitan	8,719,196	2,845,226	9.7
North Sydney	Metropolitan	5,777,039	2,761,851	6.9
Coffs Harbour	Regional Town/City	2,620,020	2,620,020	4.6
Strathfield	Metropolitan	2,240,668	2,240,668	10.3
Cessnock	Regional Town/City	2,185,491	2,185,491	7.0
Cumberland	Metropolitan	9,899,712	1,968,022	9.1
Canada Bay	Metropolitan	1,834,554	1,834,554	6.2
Port Stephens	Regional Town/City	1,607,787	1,607,787	4.6
Newcastle	Regional Town/City	7,448,870	1,222,892	3.8
Wollondilly	Metropolitan Fringe	3,675,763	1,166,251	9.2
Mosman	Metropolitan	1,157,645	1,157,645	3.2
Mid-Western Regional	Regional Town/City	842,099	842,099	3.4
Dubbo Regional	Regional Town/City	772,289	772,289	5.2
Penrith	Metropolitan Fringe	9,436,980	768,679	7.9
Hawkesbury	Metropolitan Fringe	1,011,558	752,131	3.0
Port Macquarie-Hastings	Regional Town/City	1,766,487	731,064	5.8
Albury	Regional Town/City	690,369	690,369	5.7
Griffith	Regional Town/City	635,631	635,631	3.1
Wagga Wagga	Regional Town/City	619,978	619,978	3.6
Gunnedah	Large Rural	599,675	599,675	2.6
Cabonne	Large Rural	558,922	558,922	2.4
Burwood	Metropolitan	949,817	545,246	4.7
Lismore	Regional Town/City	878,299	534,675	0.2
Queanbeyan-Palerang Regional	Regional Town/City	497,334	497,334	5.3
Snowy Monaro Regional	Regional Town/City	472,350	472,350	1.7
Eurobodalla	Regional Town/City	823,016	471,682	2.2
Bega Valley	Regional Town/City	417,764	417,764	1.7
Bathurst Regional	Regional Town/City	409,402	409,402	5.6
Lithgow	Regional Town/City	439,686	398,535	1.7
Tamworth Regional	Regional Town/City	342,175	342,175	4.1
Murray River	Large Rural	337,090	337,090	3.3
Armidale Regional	Regional Town/City	327,380	327,380	1.4
Parkes	Large Rural	324,473	324,473	0.4
Lockhart	Rural	300,957	300,957	6.2
Nambucca Valley	Large Rural	276,970	276,970	1.3

Council	Type	Cumulative increase of notional income over 4 years - excluding SVs ($)	Cumulative increase of notional income over 4 years ($)	4-year population growth (%)
Upper Lachlan	Large Rural	262,439	262,439	2.6
Shellharbour	Regional Town/City	252,037	252,037	5.5
Goulburn Mulwaree	Regional Town/City	243,828	243,828	3.6
Hunters Hill	Metropolitan	320,166	242,333	2.8
Kiama	Regional Town/City	439,415	238,577	5.7
Wingecarribee	Regional Town/City	2,274,392	234,748	5.7
Junee	Large Rural	220,877	220,877	3.9
Ballina	Regional Town/City	1,101,191	203,121	4.7
Blue Mountains	Metropolitan Fringe	473,089	188,173	1.0
Coolamon	Rural	177,580	177,580	1.8
Blayney	Large Rural	159,795	159,795	0.3
Murrumbidgee	Rural	129,808	129,808	1.4
Dungog	Large Rural	264,775	128,707	5.1
Wentworth	Large Rural	122,712	122,712	2.7
Snowy Valleys	Large Rural	115,318	115,318	-0.2
Forbes	Large Rural	112,991	112,991	0.9
Glen Innes Severn	Large Rural	104,526	104,526	0.1
Carrathool	Rural	93,220	93,220	-0.9
Temora	Large Rural	81,178	81,178	1.6
Cowra	Large Rural	74,491	74,491	0.8
Narrabri	Large Rural	70,996	70,996	-1.4
Kempsey	Regional Town/City	162,479	69,628	1.4
Tenterfield	Large Rural	86,968	61,936	-0.1
Leeton	Large Rural	58,971	58,971	1.2
Berrigan	Large Rural	54,167	54,167	1.2
Balranald	Rural	53,324	53,324	-0.3
Greater Hume	Large Rural	338,191	47,924	3.0
Gwydir	Large Rural	46,797	46,797	-0.6
Central Darling	Rural	38,391	38,391	-2.2
Edward River	Large Rural	33,148	33,148	-1.1
Walcha	Rural	30,442	30,442	-1.4
Hay	Rural	27,895	27,895	-1.3
Cobar	Large Rural	25,429	25,429	-0.7
Oberon	Large Rural	80,934	17,839	1.3
Yass Valley	Large Rural	543,556	12,976	5.0
Federation	Large Rural	7,759	7,759	-0.2
Cootamundra-Gundagai Regional	Large Rural	7,295	7,295	-1.3
Maitland	Regional Town/City	2,678,041	0	9.3
Byron	Regional Town/City	2,805,489	0	7.2
Shoalhaven	Regional Town/City	4,956,251	0	4.9

Council	Type	Cumulative increase of notional income over 4 years - excluding SVs ($)	Cumulative increase of notional income over 4 years ($)	4-year population growth (%)
Orange	Regional Town/City	0	0	4.2
Mid-Coast	Regional Town/City	3,128,447	0	2.9
Lake Macquarie	Regional Town/City	2,334,725	0	2.8
Richmond Valley	Regional Town/City	759,063	0	2.6
Muswellbrook	Large Rural	0	0	1.6
Inverell	Large Rural	199,227	0	1.3
Bellingen	Large Rural	184,489	0	0.9
Clarence Valley	Regional Town/City	130,058	0	0.4
Singleton	Regional Town/City	589,676	0	0.2
Hilltops	Large Rural	0	0	0.1
Liverpool Plains	Large Rural	0	0	-0.1
Narrandera	Large Rural	0	0	-1.1
Weddin	Rural	5,234	0	-1.2
Narromine	Large Rural	0	0	-1.6
Upper Hunter	Large Rural	0	0	-1.8
Uralla	Large Rural	0	0	-1.9
Bland	Large Rural	0	0	-2.0
Warren	Rural	0	0	-2.2
Kyogle	Large Rural	0	0	-2.4
Warrumbungle	Large Rural	0	0	-2.7
Coonamble	Rural	0	0	-3.5
Lachlan	Large Rural	0	0	-3.6
Gilgandra	Rural	0	0	-4.2
Moree Plains	Large Rural	0	0	-4.3
Broken Hill	Regional Town/City	0	0	-4.7
Walgett	Large Rural	0	0	-5.6
Brewarrina	Rural	0	0	-6.0
Bogan	Rural	0	0	-7.1
Bourke	Rural	0	0	-9.9

Source: Council financial statements and IPART calculations.

E Glossary

Term	Meaning
ABS	Australian Bureau of Statistics
***Ad valorem* rate**	A Latin term meaning "according to value." In this context it refers to the component of rates based on the unimproved value of land.
Capital improved value or CIV	Capital improved value (CIV) is the total market value of the land plus buildings and other improvements.
Developer contributions	Developer contributions are monetary payments or works-in-kind agreements that supply or contribute towards the cost of local infrastructure. They are charged by councils when new development occurs and provide land and infrastructure including open space, parks, community facilities, local roads, footpaths, stormwater drainage and local roads.
Estimated residential population or ERP	An estimate of residential population based on the concept of usual residence published annually by the Australian Bureau of Statistics.
Financial Assistance Grants or FAG	The Financial Assistant Grant program provides funding support from the Australian Government to local governments across Australia. Local government grants commissions in each state and the Northern Territory recommend the distributions of the funding under the program in accordance with the *Local Government (Financial Assistance) Act 1995* (Cth) and the National Principles for allocating grants.
Council general income	Income from ordinary rates, special rates and annual charges, with some exclusions such as special rates and charges for water supply services, sewerage services, waste management services, annual charges for stormwater management services, and annual charges for coastal protection services.
Greenfield development	Real estate construction on previously undeveloped land often on the fringe of metropolitan areas or near townships.
Infill development	The process of developing vacant or under-used parcels of land typically for residential purposes within existing urban areas. Also referred to as 'urban consolidation', 'medium density housing', 'redevelopment' or 'high rise development'.
IPART	The Independent Pricing and Regulatory Tribunal of NSW
Local government cost index or LGCI	An index used by IPART in setting the rate peg which measures price changes over time for cost items relevant to NSW councils.
Local Government Act	*Local Government Act 1993* (NSW)
Local government area or LGA	A local government area is an administrative division that a local government council is responsible for.
Minimum rate	A minimum amount of a rate specified under section 548 of the Local Government Act.
OLG	Office of Local Government
Rate peg	The term 'rate peg' refers to the maximum percentage amount NSW councils may increase their general income each year. IPART (as the Minister's delegate) specifies the rate peg each year in an order published in the gazette under section 506 of the Local Government Act. IPART can specify different rate pegs for different councils or specify a methodology for calculating the rate peg.
Special variation or SV or SRV	If approved, a special variation to the rate peg allows a council to increase its total general income above the rate peg. A special variation can be approved for a single year or up to seven years.

Term	Meaning
Supplementary valuation	Supplementary valuations are issued by the NSW Valuer General between general valuations when changes to property are recorded on the Register of Land Values. This can happen when properties or parcels of land are physically changed, subdivided or rezoned; or to correct a previous error.

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[1] Australian Bureau of Statistics (ABS), ERP by LGA (ASGS 2020), 2001 to 2020, March 2021.
[2] Office of Local Government, *Local Government Code of Accounting Practice and Financial Reporting – Section 4 – Special Schedules*, available at https://www.olg.nsw.gov.au/councils/council-finances/financial-reporting/local-government-code-of-accounting-practice-and-financialreporting/.
[3] ABS, National, state and territory population, December 2020.
[4] ABS, National, state and territory population, December 2020; DPIE, NSW population projections, December 2019.
[5] DPIE, NSW population projections, December 2019
[6] Regional Cities NSW submission to IPART Draft Report, 16 August 2021, pp 5-6.
[7] The CIE, *Analysis of rate peg options to account for population growth*, 19 May 2021, p 15.
[8] Hawkesbury City Council submission to IPART Draft Report, 6 August 2021, p 1; Local Government Professionals submission to IPART Draft Report, 6 August 2021, p 1; Regional Cities NSW submission to IPART Draft Report, 16 August 2021, p 10.
[9] Office of Local Government - Your Council database, accessed 16 June 2021 & IPART analysis.
[10] The CIE, *Analysis of rate peg options to account for population growth*, 19 May 2021, pp 23 and 30-31.
[11] Regional Cities NSW submission to IPART Draft Report, 16 August 2021, pp 2-3; Blacktown City Council submission to IPART Draft Report, 4 August 2021, pp 1-2
[12] Cumberland City Council submission to IPART Draft Report, 4 August 2021, pp 4-6.
[13] NSW Revenue Professionals submission to IPART Draft Report, 4 August 2021, p 5; Randwick City Council submission to IPART Draft Report, 5 August 2021, p 4; J. Christie submission to IPART Draft Report, 6 August 2021, p 1; Bayside Council submission to IPART Draft Report, 12 August 2021, p 1; and City of Sydney submission to IPART Draft Report, 16 August 2021, p 9.
[14] Wollongong City Council submission to IPART Draft Report, 2 August 2021, p 1; NSW Revenue Professionals submission to IPART Draft Report, 4 August 2021, p 5; Randwick City Council submission to IPART Draft Report, 5 August 2021, p 4; J. Christie submission to IPART Draft Report, 6 August 2021, p 1; Bayside Council submission to IPART Draft Report, 12 August 2021, p 1; City of Sydney submission to IPART Draft Report, 16 August 2021, p 9.
[15] Bayside Council submission to IPART Draft Report, 12 August 2021, pp 1 and 6, and IPART calculations.
[16] City of Sydney submission to IPART Draft Report, 16 August 2021, p 9.
[17] City of Newcastle submission to IPART Draft Report, 3 August 2021, p 2; S. Young submission to IPART Draft Report, 29 July 2021, p 1; Wollongong City Council submission to IPART Draft Report, 2 August 2021, p 1; NSW Revenue Professionals submission to IPART Draft Report, 4 August 2021, p 3; Cumberland City Council submission to IPART Draft Report, 4 August 2021, pp 3-4.
[18] Regional Cities NSW submission to IPART Draft Report, 16 August 2021, p 6, and Randwick City Council submission to IPART Draft Report, 5 August 2021, pp1-2.
[19] Office of Local Government - Your Council database, accessed 16 June 2021 & IPART analysis.
[20] Office of Local Government - Your Council database, accessed 16 June 2021 & IPART analysis.
[21] Queanbeyan-Palerang Regional Council submission to IPART Draft Report, 5 August 2021, p 5.
[22] Northern Beaches Council submission to IPART Draft Report, 6 August 2021, p 2, Lake Macquarie City Council submission to IPART Draft Report, 6 August 2021, pp 1-3; City of Ryde submission to IPART Draft Report, 5 August 2021, p 2, LG NSW submission to IPART Draft Report, 6 August 2021, p 7, Campbelltown City Council submission to IPART Draft Report, 6 August 2021, p 4, and NSW Revenue Professionals submission to IPART Draft Report, 4 August 2021, pp 5-6.
[23] City of Newcastle submission to IPART Draft Report, 3 August 2021, p 1; NSROC submission to IPART Draft Report, 5 August 2021, pp 1-2; LG NSW submission to IPART Draft Report, 6 August 2021, p 7; Wollondilly Shire Council submission to IPART Draft Report, 6 August 2021, p 3; Liverpool City Council submission to IPART Draft Report, 6 August 2021, p 3, and Local Government Professionals submission to IPART Draft Report, 6 August 2021, p 2.
[24] City of Sydney submission to IPART Draft Report, 16 August 2021, p 4.
[25] Blacktown City Council submission to IPART Draft Report, 4 August 2021, pp 12-13 and Liverpool City Council submission to IPART Draft Report, 6 August 2021, p 2.
[26] Workshop with metropolitan councils on 28 May 2021; council submissions.
[27] This amount is the amount specified in section 126 of the Local Government (General) Regulation 2005 for the purposes of section 548(3)(a) of the *Local Government Act 1993*.
[28] City of Ryde submission to IPART Draft Report, 5 August 2021, p 2; NSROC submission to IPART Draft Report, 5 August 2021, p 1; Campbelltown City Council submission to IPART Draft Report, 6 August 2021, pp 2-3; LG NSW submission to IPART Draft Report, 6 August 2021, p 5; Wollondilly Shire Council submission to IPART Draft Report, 6 August 2021, p 4; Mosman Council submission to IPART Draft Report, 6 August 2021, p 3; City of Newcastle submission to IPART Draft Report, 3 August 2021, p 2; Randwick City Council submission to IPART Draft Report, 5 August 2021, p 1.
[29] City of Ryde submission to IPART Draft Report, 5 August 2021, p 2; NSROC submission to IPART Draft Report, 5 August 2021, p 1; Campbelltown City Council submission to IPART Draft Report, 6 August 2021, pp 2-3; LG NSW submission to IPART Draft Report, 6 August 2021, p 5; LG NSW submission to IPART Draft Report, 6 August 2021, p 5.
[30] Bayside Council submission to IPART Draft Report, 12 August 2021, p 3; Cumberland City Council submission to IPART Draft Report, 4 August 2021, p 4; Anonymous submission to IPART Draft Report, 5 August 2021, p 1 and 3.
[31] Queanbeyan-Palerang Regional Council submission to IPART Draft Report, 5 August 2021, pp 3 and 12.
[32] Georges River Council submission to IPART Draft Report, 5 August 2021, p 2; Cumberland City Council submission to IPART Draft Report, 4 August 2021, p 5.
[33] Georges River Council submission to IPART Draft Report, 5 August 2021, p 1.
[34] LGNSW (2018) Impact of Cost Shifting on Local Government in NSW, p. 4. Referenced in Kyogle Council's submission to IPART Draft Report, 30 July 2021, p 4.

[35] M. Fletcher submission to IPART Draft Report, 29 July 2021, p 1, and J. Lee submission to IPART Draft Report, 29 July 2021, p 1.

[36] K. Brooks submission to IPART Draft Report, 7 July 2021, p 1; K. May submission to IPART Draft Report, 12 July 2021, p 1; M. Charlton submission to IPART Draft Report, 13 July 2021, p 1-6; Anonymous submission to IPART Draft Report, 30 July 2021, p 1; D. Walker submission to IPART Draft Report, 31 July 2021, p 1, and People of former Canterbury Council area submission to IPART Draft Report, 17 July 2021, pp 1-11.

[37] DPIE, *NSW Government Response to NSW Productivity Commission's Review of Infrastructure Contributions in NSW*, March 2021.

[38] DPIE, Infrastructure contributions reform webpage, accessed 22 June 2021.

[39] NSW Productivity Commission, *Review of infrastructure contributions in New South Wales*, p 42.

[40] The CIE, *Analysis of rate peg options to account for population growth*, 19 May 2021, p 6.

[41] Various submissions including: Bayside Council, Submission to IPART Issues Paper, p 1; Blacktown City Council, Submission to IPART Issues Paper, pp 4–5; Blacktown City Council, Submission to IPART Issues Paper, pp 4–5; Byron Shire Council, Submission to IPART Issues Paper, pp 1–2; Canada Bay Council, Submission to IPART Issues Paper, p 1; Canterbury-Bankstown Council, Submission to IPART Issues Paper, pp 2–4; North Sydney Council, Submission to IPART Issues Paper, p 4; Tamworth Regional Council, Submission to IPART Issues Paper, p 3; NSW Revenues Professionals, Submissions to the Issues Paper, p. 4; Campbelltown City Council, Submission to IPART Issues Paper, pp 2–5; Wollongong City Council, Submission to IPART Issues Paper, p 2; Wollondilly Shirt Council, Submission to IPART Issues Paper, p. 2; Canberra Region Joint Organisation, Submission to IPART Issues Paper, p 4; Cessnock City Council, Submission to IPART Issues Paper, p 2; City of Newcastle, Submission to IPART Issues Paper, p 1; Clarence Valley Council, Submission to IPART Issues Paper, p 1; The Hills Shire Council, Submission to IPART Issues Paper, p. 3; Cumberland City Council, Submission to IPART Issues Paper, pp. 5–9; Inner West, Submission to IPART Issues Paper, pp. 2–3; Ku-ring-gai Council, Submission to IPART Issues Paper, p. 3; NSW Revenues Professionals, Submissions to the Issues Paper, pp. 6–7; City of Ryde, Submission to IPART Issues Paper, p. 2; Hornsby Shire Council, Submission to IPART Issues Paper, p. 2; Liverpool City Council, Submission to IPART Issues Paper, pp. 3–6; Northern Beaches Council, Submission to IPART Issues Paper, pp. 1–2; Wentworth Shire Council, Submission to IPART Issues Paper, p. 3; Wollondilly Shirt Council, Submission to IPART Issues Paper, p. 2; Georges River Council, Submission to IPART Issues Paper, pp. 1–4; Hawkesbury City Council, Submission to IPART Issues Paper, pp 1–2; Local Government NSW, Submission to IPART Issues Paper, pp 4–5; Lane Cove Council, Submission to IPART Issues Paper, pp 1–2; Maitland City Council, Submission to IPART Issues Paper, pp 2–3; Mid-Western Regional Council, Submission to IPART Issues Paper, pp 1–3; Port Stephens Council, Submission to IPART Issues Paper, pp 1–4; Queanbeyan-Palerang Regional Council (QPRC), Submission to IPART Issues Paper; Randwick City Council, Submission to IPART Issues Paper, pp 2–4; Wagga Wagga City Council, *Wagga Wagga City Council's response to questions*, pp 5–6; Waverly, Submissions to IPART Issues Paper, pp. 1–2; Shellharbour City Council, Submission to IPART Issues Paper, pp 1–2; Wentworth Shire Council, Submissions to IPART Issues Paper, pp. 1–2; Willoughby City Council, Submissions to IPART Issues Paper, pp. 3–5; WSROC, Submission to IPART Issues Paper, pp. 13–17; Wollongong City Council submission to IPART Draft Report, 2 August 2021, pp 1-2; Randwick City Council submission to IPART Draft Report, 5 August 2021, p 4; J. Christie submission to IPART Draft Report, 6 August 2021, p 1; Bayside Council submission to IPART Draft Report, 12 August 2021, p 1; City of Sydney submission to IPART Draft Report, 16 August 2021, p 9; Regional Cities NSW submission to IPART Draft Report, 16 August 2021, pp 4-5; Cumberland City Council submission to IPART Draft Report, 4 August 2021, pp 4-5.

[42] The CIE, *Analysis of rate peg options to account for population growth*, 19 May 2021, p 15.

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