

Population

Overview

- 1 Population estimates are required for all of the Commission's assessments and the calculation of GST relativities. Population data are required for a range of population groups disaggregated by various characteristics related to the differential use or cost of services, such as age, Indigenous status, socio-economic status and remoteness areas as defined by the ABS.
- 2 This chapter provides details on the population data used in the calculations, including how these are estimated and used.

Estimated Resident Population

- 3 The population data used in the estimation of GST relativities is Estimated Resident Population, produced by the ABS. This measure includes all people who usually reside in Australia (regardless of nationality, citizenship or visa status), excluding those present for foreign consular or diplomatic purposes. The data link people to their place of usual residence and are updated at each Census. The population data have been updated based on the 2021 Census and associated geographies.
- 4 The assessment years and application year for the Commission's recommendation on GST relativities are based on financial years. The most representative date for population in a given financial year is 31 December. The ABS produces population data disaggregated by age, remoteness and socio-economic status as of 30 June annually. The Commission scales the 30 June disaggregated population data to state total populations as of 31 December for each year.

State level population estimates

- 5 State level population is used for calculating:
 - equal per capita distributions
 - population growth
 - per capita GST relativities.
- 6 In each update of GST relativities, *Table S1-1 in supporting data* shows total state populations for the relevant assessment years and the application year.

Population growth

- 7 Relative differences in state population growth affect states' investment and net borrowing needs.
- 8 The investment assessment estimates the need of each state to provide the national average level of infrastructure per person using the relevant 'user population'. State Estimated Resident Population is used as the measure of the user population for the services to communities, other expenses and non-urban transport investment assessments. Category specific measures of user populations are used in other expense assessments (see investment chapter of the *Commission's Assessment Methodology*). Differences in states' population growth rates are the only driver of differences in net borrowing assessed needs.
- 9 In each update of GST relativities, *Table S1-2 in supporting data* shows states' annual population growth rates for the relevant assessment years.

Estimating disaggregated populations

- 10 The Commission uses administrative data on the use and cost of services from states and Commonwealth agencies to identify the characteristics of higher or lower cost population groups in the provision of state services. Disaggregated population data are required so that national costs by population group can be distributed across states based on their share of each population group.

First Nations population estimates

- 11 Aside from the census year, the ABS does not provide population data disaggregated by Indigenous status. Therefore, for subsequent years, the Commission imputes First Nations population estimates. This is done by applying the First Nations share of the total population within each disaggregated population group (in each census year) and then adjusting this to match the ABS estimated First Nations population projections as of 30 June each year, by age and state. The resulting estimated numbers of First Nations people in each disaggregated group are subtracted from the group's total to give the number of non-Indigenous people in each group.

Statistical Area Level 1 based classifications

- 12 The finest level of disaggregation of population, by remoteness and socio-economic status, is that based on classifications at the ABS Statistical Area Level 1 (SA1) geography. While it would be ideal if administrative data provided by the states and Commonwealth agencies were also available at the SA1 level, this is not always the case. In practice, the Commission receives administrative data on the use and cost of services from states and other agencies that reflect varying geographies. The Commission uses concordance maps (by postcode and other geographies) to get a breakdown of administrative data by remoteness and socio-economic status.

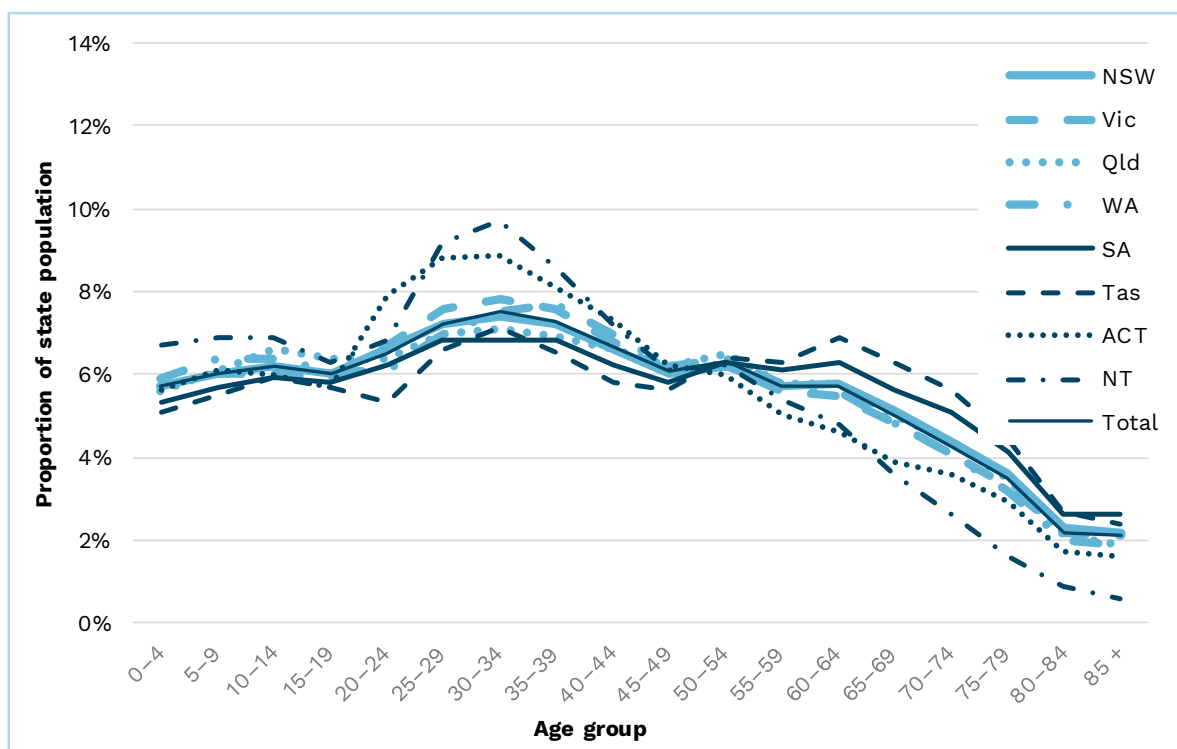
Population characteristics used in assessments

- 13 The main population characteristics used in the expense assessments are Indigenous status, age, socio-economic status and remoteness. In the Commission's context, the main way in which these attributes affect the assessments is where states have different shares of these population groups. In selecting classifications, it is more important to consider how state populations differ, because differences in use rates only become relevant when state population characteristics differ (for example, high First Nations use rates would be irrelevant if all states had the same share of First Nations populations).
- 14 Where possible, the Commission uses a common structure for the classification of population characteristics for expense categories (described below). Having a common structure, with fewer unique classifications for these characteristics, reduces the size of the datasets required, makes for simpler assessments and reduces the risk of errors. It also enhances the comparative analysis that can be undertaken between expense categories.
- 15 However, where service use rates differ between states, it may be material to use different levels of detail within the common structure.

Age

- 16 The Commission aims to have common classification structures for the various assessments. This is best demonstrated with age but is valid in other classifications. As the primary focus is on the difference in the distribution of populations between states, the Commission was guided in selecting common structures by the patterns in Figure 1. This shows that Tasmania and South Australia have below average shares of 0-49 year olds, and above average shares of 60+ year olds. In contrast, the Northern Territory and the ACT have above average shares of 20-44 year olds but their shares of 60+ year olds are below the national average.
- 17 In the 2025 Review, the major age groups used are 0-14, 15-64 and 65+ years. This structure is used in a range of social and economic statistics and has been generally adopted in the Commission's assessments. Within these major groups, further disaggregation has been applied where there is a conceptual case and it has been material to do so for different expense categories (see chapters on Health, Welfare and Justice of the *Commission's Assessment Methodology*).
- 18 In each update of GST relativities, *Table S1-5 in supporting data* shows state populations by major age groups for year 3 of the assessment period.

Figure 1 Age structure of state populations, June 2023



Source: ABS, [National, state and territory population](#), December 2023

Remoteness

- 19 Many of the assessments use disaggregated populations according to degree of remoteness, as there is evidence that this affects both the use of services and the cost of delivering services. The indicator of remoteness groups like areas together and distinguishes unlike areas.
- 20 Category assessments use either the five remoteness areas as specified by the ABS, or an aggregation of these into groups, depending on the materiality of each disaggregation or the quality of the related administrative data. For example, in the welfare assessment, it is not material to split remote and very remote categories for First Nations child protection and family services, so these are grouped together.
- 21 In each update of GST relativities, *Table S1-4 in supporting data* shows state populations by remoteness area for year 3 of the assessment period.

Indigenous status and socio-economic status

- 22 The Commission uses separate measures of socio-economic status for First Nations and non-Indigenous populations.
- 23 The Non-Indigenous Socio-Economic Index for Areas (NISEIFA) was developed for the Commission by the ABS. This index uses the same indicators as the Socio-Economic Indexes for Areas (SEIFA) Index of relative socio-economic disadvantage.¹ The

¹ ABS (2021), Census of Population and Housing, [Socio Economic Indexes for Areas, Australia, released 27 April 2023](#).

Commission uses NISEIFA to classify the non-Indigenous population into socio-economic quintiles. The Indigenous Relative Socio-economic Outcomes (IRSEO) index was developed at the Australian National University.² The Commission uses this index to classify the First Nations population into socio-economic quintiles. These indexes are area-based measures.

- 24 Some assessments do not use IRSEO and NISEIFA to classify the population. This occurs when the administrative data on the use and cost of services from states or third parties cannot be classified to IRSEO and NISEIFA quintiles. The schools assessment uses the Socio-Educational Advantage quartiles as the basis for estimating school student socio-economic status. The housing assessment uses household income to classify households as either low or high socio-economic status.
- 25 In each update of GST relativities, *Table S1-3 in supporting data* shows state First Nations and non-Indigenous populations by socio-economic quintile for year 3 of the assessment period.

Urban Centres and Localities

- 26 Urban Centres and Localities are used as the primary geographic measure in assessments that relate to urban form. However, in certain instances the Commission needs to make adjustments to better reflect what states do. For example:
- Urban transport is often provided as an integrated network across closely neighbouring Urban Centres and Localities. Therefore, in the Transport category, all Urban Centres and Localities within a Significant Urban Area are aggregated and treated as a single urban centre.^{3,4} The Commission considers that this generally better reflects how states deliver this service.
 - In the services to communities category, the Commission considers that subsidies for electricity are provided in remote and very remote towns. Because Urban Centres and Localities are not defined for towns of less than 200 people, the Commission has defined small urban areas using aggregations of mesh blocks, using criteria like that used by the ABS to define urban areas.⁵
- 27 These adjustments and the other category specific criteria relating to how Urban Centres and Localities are used in each category are discussed in the relevant chapters (see the roads, transport and services to communities chapters of the *Commission's Assessment Methodology*).

² IRSEO was developed by the Centre for Aboriginal Economic and Policy Research (see the CAEPR website, <http://caepr.cass.anu.edu.au>), at the Australian National University.

³ [Urban Centres and Localities](#) represent areas of concentrated urban development with populations of 200 people or more.

⁴ The [Significant Urban Area](#) structure of the Australian Statistical Geography Standard represents significant towns and cities of 10 000 people or more. A single Significant Urban Area can represent either a single Urban Centre or a cluster of related Urban Centres.

⁵ [Mesh blocks](#) are the smallest geographic region in the Australian Statistical Geography Standard and the smallest geographical unit for which census data are available.