Australian Government

Centre for Population

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Fundamentals of migration in Australia: Migration concepts and measurements



Understanding migration concepts & measurements

Understanding Australia's different migration concepts and measurements is crucial to informed analysis and policy.

Background

Understanding how migration is measured helps policy makers and the public understand different aspects of our migration system. These measurements can be complex which can inhibit our understanding of the interaction between them.

Of particular interest is how migration, which is measured as net overseas migration (NOM), contributes to population growth. However, NOM is commonly confused with the Migration Program planning level, which measures how many places are available in the permanent Migration Program in a given financial year. Understanding the differences between these measurements and other ways of counting migrants helps inform migration policy and population planning.

Scope of this quick guide

This quick guide covers common ways that migration is measured in Australia, outlining what each measurement does and what they help us understand. Key concepts which underlie these measurements are also explained.

This quick guide is part of a series by the Centre for Population. For more information and other quick guides visit: www.population.gov.au.

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Key concepts

Migration measurements are broadly grouped into migrant flows (in or out of Australia), or stocks of visa holders (those residing in Australia).

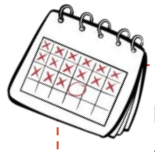
Migrant flows and stocks

An incoming migrant is a person who changes their place of usual residence and resides in Australia for 12 months out of a 16-month period. Migrant flows are the number of migrants entering and exiting Australia over a given period. Australian citizens returning from living overseas (or departing to live overseas) count towards this measurement. Stocks of visa holders are the number of temporary and permanent visa holders in Australia at a given point in time.

Visas can be granted to someone who is located inside Australia (onshore) or outside Australia (offshore). Onshore and offshore visa grants mainly affect NOM which measures migration flows.

For example, if a temporary visa holder is currently residing in Australia and is granted a permanent visa, this migrant will not appear as a migration flow at the time of the permanent visa being granted, nor will they change the total stock of visa holders in Australia. When they previously arrived as a temporary migrant they were counted in migration flows.

Offshore visa grantees can also continue residing in their origin country for some time before arriving in Australia or they may never arrive. This means that visa grants data have some limitations in being a leading indicator for NOM.



Flow

Number of people entering and exiting Australia over a given period.

Flow data measure the number of people *over a period of time*, such as a month, quarter or year.

Measurements include visa lodgements and grants (if granted offshore) and net overseas migration.

Net inflows = more stock

Net outflows = less stock

Stock



Number of temporary and permanent visa holders in Australia at a given point in time.

Stock data measure the total number of people at a *given point in time.*

For example, the total number of temporary visa holders in Australia or Estimated Resident Population.

Migration measurements are used for a range of purposes.

Key measurements

Measurement	Definition	Primary uses	Publication
Early indicators of migration flows			
Visa lodgements	Count of all visa applications received (onshore and offshore).	Tracks the volume, composition and progress of visa lodgements. Early indicators of future migration flows.	Published quarterly by the Department of Home Affairs (Home Affairs) in the *Migration Program Report.*
Visa grants	Count of all visa lodgements that are approved (onshore and offshore).		
Migration Program planning level	Number of permanent visas available to be granted each year, as decided by the Government in consultation with stakeholders.	Determines the number and type of permanent visas available each year.	Announced annually by the Government in the Budget process.
Border crossings (arrivals and departures)	Number of times Australia's international border is crossed by visa holders, Australian citizens and permanent residents.	Early indicator of future migration flows.*	Published monthly by the ABS in *Overseas Arrivals and Departures*.
Measurement of migration flows			
Net overseas migration	Net gain or loss of population through immigration to Australia and emigration from Australia. It includes movements of Australian citizens, permanent visa holders and temporary visa holders.	Measures how much Australia's population has changed due to overseas migration.	Published annually by the ABS in *Overseas Migration* and quarterly in *National, state and territory population*.
Measurement of visa holders			
Stocks of visa holders	The number of temporary visa holders in Australia at a given point in time. Information is also available on the number of permanent visa holders in Australia, along with country of birth for Australia's entire population at a given point in time.	Monitoring the number of international students in Australia, or skilled temporary workers in labour markets. Provides opportunities for sophisticated analysis to help understand visa holders, including analysing demographic and economic characteristics.	Published quarterly by Home Affairs, on data.gov.au, under *Temporary visa holders in Australia*. Permanent visa holder stocks and actual Estimated Resident Population are published once every five years in the ABS' *Census*.

*The Centre adjusts border crossings data to improve its accuracy as a leading indicator of migration. These adjusted measures differ from net permanent and long-term (PLT) border crossings published by the ABS in Overseas Arrivals and Departures, which the Centre does not use as an indicator of migration. See Box 2 of the 2025 Population Statement for further information.

Key measurement: Visa lodgements and grants

Visa lodgements and grants are early indicators of migration flows.

What are visa lodgements and grants?

Visa lodgements data capture the number of visa applications received by the Department of Home Affairs.

Visa grants data capture the number of visa lodgements that are approved.

Home Affairs publishes visa lodgements and grants data on a quarterly basis, using information obtained from visa processing systems. Together, these data allow researchers to track the volume, composition and progress of visa lodgements for both temporary and permanent visas.

What does this measurement help us understand?

Visa lodgements and grants data help monitor trends in demand for different visa types and the characteristics of various cohorts who submit applications. Visa grants to people residing offshore can also be used as a leading indicator of levels of migrant arrivals in Australia. Visa lodgements are a less reliable leading indicator of migrant arrivals, in part because of the time that can elapse between lodgement, grant, and the migrant's arrival in Australia. Additionally, some visa lodgements may be withdrawn or not granted. Because lodgements and grants data are very detailed, they can also be used to understand potential migrant responses to changes in Government visa policies.



8 people apply for different types of visas. These are captured as **8 visa lodgements.**



One of the visa lodgements is from Carli, who lodges a permanent visa application

Another lodgement is from Sanjay, who lodges a student visa application



Carli and Sanjay's visa lodgments are approved, and they are granted their visas. These are counted as **two visa grants.**

Key measurement: Migration Program planning level

Changes to the Migration Program planning level can affect the volume of migration flows.

What is the Migration Program planning level?

The permanent Migration Program planning level is the number of skilled, family and special eligibility permanent visas available to be granted each year within the permanent Migration Program. The planning level and allocations for each permanent visa type is announced by the Government in the annual Budget. The composition of the planning level is split between skilled, family and special eligibility visas, depending on policy needs.

Take up of the permanent Migration Program is published annually against the corresponding planning level by Home Affairs in the *Migration Program Report*.

What does this measurement help us understand?

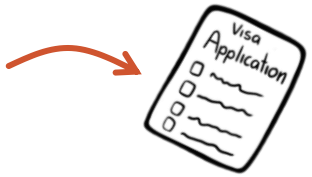
The planning level is a policy lever that the Government uses to influence the volume and composition of new permanent migrants.

The planning level assists in the longer-term planning of population, infrastructure investments, social policies and fiscal budgeting.

Many permanent visas are granted to people already residing in Australia meaning they are counted as taking one place in the Migration Program. They do not contribute to NOM for the same period in which the grant was made as they already contributed to NOM during an earlier period as a temporary migrant.



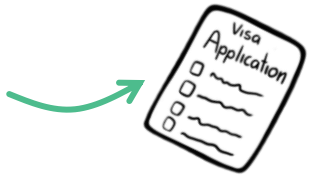
Carli is not in Australia and lodges an application for a skilled permanent visa.



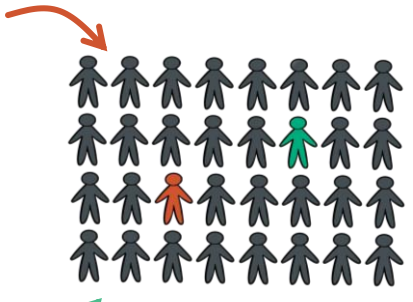
Carli's visa is granted, and she is counted as occupying one of the places in the Migration Program.



Tom is in Australia on a temporary visa and lodges an application for a permanent visa under the family stream of the Migration Program.



Tom's visa is granted, and he is counted as occupying one of the places in the Migration Program.



Key measurement: Border crossings

Border crossings capture all arrivals and departures in Australia.

What is classified as a border crossing?

Border crossings measure the number of times Australia's international border is crossed. An individual is counted each time they cross the border, even if they travel in and out multiple times. Australian citizens and all visa holders are captured in this measurement.

The ABS compiles border crossings in its *Overseas Arrivals and Departures* publication. This publication is released monthly with a 6-week lag. Border crossings data are compiled from a range of sources including the Incoming Passenger Card completed by all travellers, Home Affairs' visa systems and Medicare enrolment data.

The vast majority of border crossings are arriving (or departing) tourists and short-term business visitors who do not count as migrants. Pre-pandemic, NOM arrivals accounted for just 2.5 per cent of all arrivals to Australia.

What does this measurement help us understand?

The Government uses border crossings data to estimate education and tourism exports, which feeds into Australia's Balance of Payments and National Accounts

Border crossings data are more timely than other migration flow data releases, meaning they can be used as a potential leading indicator for NOM.

These data can be used to better understand the levels, composition and characteristics of people travelling to and from Australia.



Sanjay arrives in Australia on a temporary visa. During his stay, Sanjay returns home for two months before returning to Australia. In the border crossings data, these are counted as:

- One departure
- Two arrivals



Sophie is an Australian citizen who has recently undertaken three overseas work trips. In the border crossings data, these are counted as:

- Three departures
- Three arrivals



Key measurement: Net overseas migration

Net overseas migration measures how migration contributes to changes in Australia's population.

What is net overseas migration?

Net overseas migration (NOM) is the net gain or loss of population through immigration to Australia and emigration from Australia. These numbers feed into Australia's Estimated Resident Population alongside births and deaths data.

Overseas migrant arrivals are people (who were living overseas) entering and staying in Australia for at least 12 months over a 16-month period. Conversely, overseas migrant departures are people who were living in Australia and leave for at least 12 months over a 16-month period. This is known as the '12/16 rule' and means a change of usual residence from overseas to Australia or vice versa. Overseas migrant arrivals/departures include individuals on permanent and temporary visas, as well as departing and returning Australian citizens.

The 12/16 rule was incorporated into measurement of NOM in 2006, as such, any prior data are not entirely comparable with more recent releases.

The ABS calculates NOM using data from various visa processing systems, passport documents and Incoming Passenger Cards completed by people crossing the Australian border.

NOM data are included in the quarterly National, state and territory population (NSTP) publication, and then compiled and released for the financial year as part of the Overseas Migration publication. NOM is published as an estimate with a lag of around 6 months from the end of the relevant quarter.

What does this measurement help us understand?

NOM is the key measurement of how Australia's population has changed due to migration. Together with births and deaths figures, this determines the total population change within Australia.

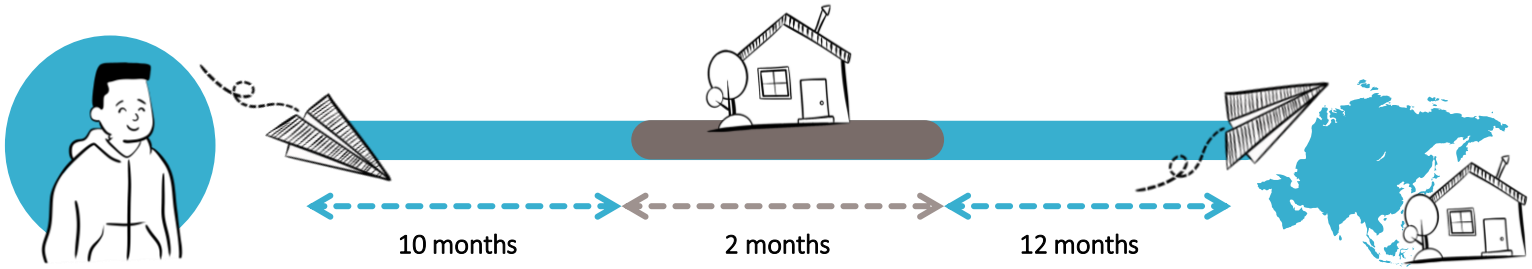
The Centre for Population analyses historical NOM data as well as forecasts the components of population growth including NOM. These forecasts underpin Treasury's economic and fiscal forecasts and help governments plan for future population growth.

Differences between NOM and other measurements of migration can cause confusion – these differences are explored on pages 10 and 11. Importantly, the 12/16 rule method of NOM is how the standard definition of migration is implemented in Australia. A cumulative 12-month threshold over a 16-month period allows people living in Australia but making regular short trips outside Australia to still be included in the population, and vice versa.

The next page provides an example of the 12/16 rule in operation.

Key measurement: Net overseas migration (continued)

Net overseas migration is the net gain or loss of population from overseas migrant arrivals and overseas migrant departures.



Sanjay arrives in Australia on his Student visa and commences his tertiary studies.

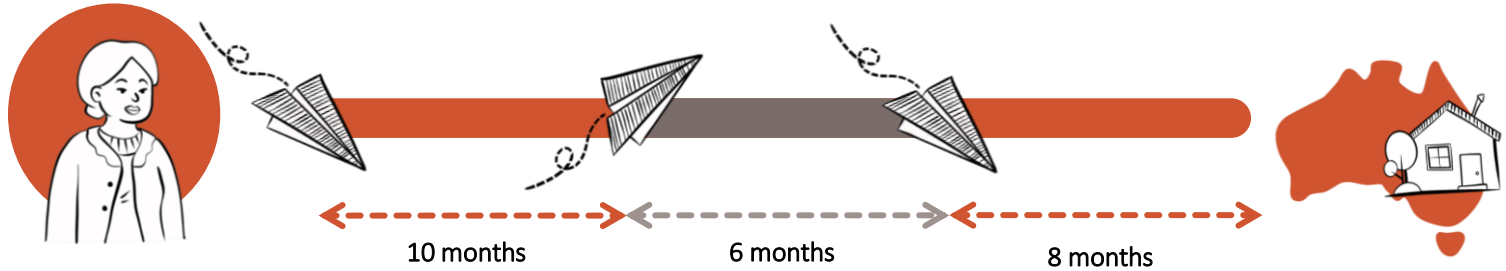
Sanjay undertakes his tertiary studies in Australia for 10 months.

Sanjay returns home for two months before returning to Australia to continue his studies.

After two years, Sanjay decides to return home permanently.

Sanjay **meets** the 12/16 rule and is counted in NOM.

Sanjay **contributes towards NOM and is counted in the Estimated Resident Population**. When Sanjay leaves Australia permanently, he contributes to NOM as a migrant departure and is no longer counted in the Estimated Resident Population.



Carli arrives in Australia on a permanent skilled visa to start a job.

After 10 months, Carli needs to return to her previous country of residence.

Carli spends 6 months in her previous country of residence before returning to Australia.

Carli spends the next 8 months living and working in Australia.

Carli **does not meet** the 12/16 rule and is *not* counted in NOM.

Carli is **not counted in NOM or Estimated Resident Population** in this 24 month period.

Key measurement: Stocks of visa holders

Data on stocks of temporary visa holders are available quarterly, while permanent visa holders are available every Census.

What are stocks of visa holders data?

These data provide the total number of visa holders in Australia on a temporary or permanent visa at a point in time. This measurement is based on the physical presence of a visa holder, so it gives us a more accurate picture of the number of visa holders in Australia than migration flows data like NOM which is measured by the place of usual residence ('12/16 rule').

These data also capture the effect of when people transition visas while they are in Australia (e.g. moving from a Student to a temporary work visa). Visa transitions are a common occurrence (see the Centre for Population's case study on *Pathways from temporary visas to permanent residency*). Data on stocks of temporary visa holders are compiled from Home Affairs' visa processing systems and published quarterly on www.data.gov.au under *Temporary visa holders in Australia*. Data on stocks of both temporary and permanent visa holders are released every 5 years in the *ABS Census* (since 2016 and 2011).

What does this measurement help us understand?

These data capture the total number of visa holders in Australia and which visas they hold. This includes temporary visas holders who have not met the 12/16 NOM rule and are therefore not captured in NOM or the Estimated Resident Population. Factoring in this temporary component alongside Estimated Resident Population is important for service delivery and infrastructure planning by governments as well as planning and monitoring by business. For example, it can be used by the education sector to understand the number of international students currently studying in Australia.

Census visa data can be analysed alongside other demographic and economic characteristics of migrants to better understand and compare different visa holders. For example, Census data allows researchers to compare employment statistics of permanent and temporary visa holders to the general population.



Sanjay is counted in temporary visa holder stock

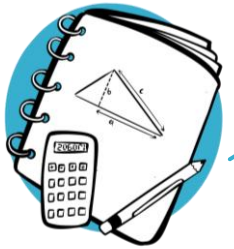
Carli is *not* counted in temporary visa holder stock



Sanjay left Australia on his Student visa for a two-month period and then returned. Dev is captured in Australia's stock of temporary visa holders at the point in time that he is present in Australia.

Carli is on a permanent visa, so she is never counted as being in Australia's stock of temporary visa holders.

Case study: Sanjay's journey reflected in migration measurements

Scenario	 Sanjay lives in India but wants to study in Australia. Sanjay applies for a Student visa.	 Sanjay is granted his Student visa while he is still in India.	 Sanjay arrives in Australia.	 Sanjay begins his studies at university.	 Sanjay completes his degree over a two-year period. He leaves Australia once to visit home for two months.	 After graduating from his degree, Sanjay returns to India.
Measurement	**VISA LODGEMENTS** When Sanjay lodges his application, it is counted as one visa lodgement.	**VISA GRANTS** When Sanjay is granted his visa, it is counted as one visa grant.	**BORDER CROSSINGS** When Sanjay arrives in Australia, it is counted as one border crossing (arrival).	**STOCK OF TEMPORARY VISA HOLDERS** While on a Student visa, Sanjay is counted as one temporary visa holder in Australia and is counted in temporary visa stocks data.	**NET OVERSEAS MIGRATION** Sanjay is counted within NOM and therefore Estimated Resident Population.	**BORDER CROSSINGS** When Sanjay leaves Australia, this is also counted as one border crossing (departure) and a NOM departure.

Case study: Carli's journey reflected in migration measurements

Scenario	 Carli wants to live and work in Australia and lodges a permanent visa application.	 Carli is granted her permanent visa.	 Carli spends the next 10 months living and working in Australia.	 Carli returns to her previous country of residence after 10 months.	 Carli spends 6 months away from Australia before returning to live and work in Australia.	 Carli lives and works in Australia for 8 months but returns to her previous country of residence permanently thereafter.
Measurement	**VISA LODGEMENTS** When Carli lodges her application, it is counted as one visa lodgement.	**VISA GRANTS** When Carli is granted her visa, it is counted as one visa grant.	**MIGRATION PROGRAM PLANNING LEVEL** Carli is counted as occupying one place under the Migration Program planning level.	**BORDER CROSSINGS** When Carli leaves Australia, it is counted as one border crossing (departure).	**BORDER CROSSINGS** When Carli arrives back in Australia, it is counted as one border crossing (arrival).	**NET OVERSEAS MIGRATION** Carli is *not* counted in NOM or Estimated Resident Population as she has not been in Australia for 12 months over a 16-month period.

Common questions and misconceptions

The Migration Program planning level is often confused with net overseas migration (NOM).

Is NOM the same as the Migration Program planning level?

No. NOM is a population measurement based on the concept of 'usual place of residence'. It captures the net gain or loss of population through immigration (overseas migrant arrivals) to and emigration (overseas migrant departures) from Australia. It captures people on both temporary and permanent visas as well as Australian citizens and unlawful residents.

The Migration Program planning level determines how many skilled, family and special eligibility permanent visas can be granted each program year. Many of these grants are made to temporary visa holders who are already onshore (in Australia). Therefore, these individuals are not captured directly in NOM at the time of their permanent visa grant but rather had already contributed to NOM when they initially arrived (if they meet the '12/16 rule').

What is the key driver of NOM?

In any given year, temporary visas account for the bulk of net migration, driving volatility in NOM from year to year. Many permanent visa holders first hold a temporary visa. Over a long period, the permanent Migration Program is the key driver of NOM, as anyone who doesn't get a permanent visa will typically leave

What is the difference between a 'stock' and a 'flow'?

Stock data sources capture total numbers of visa holders at a given point in time. For example, the total number of temporary visa holders in Australia or Estimated Resident Population.

Flow data sources capture movements over a period of time, such as a month, quarter or year. This includes NOM.

Flows and stocks are related: a flow over a given period is the same as the change in the stock between the start and end of that period.

Does Estimated Resident Population account for everyone that is actually in Australia?

No. Estimated Resident Population – as the official measure of Australia's population – captures people whose usual residence is in Australia. It does not capture people who are in Australia for short periods of time. Estimated Resident Population uses NOM to determine the net gain or loss of population through immigration to Australia (overseas migrant arrivals) and emigration from Australia (overseas migrant departures).

This measurement helps policy makers understand the planning required for Australia's usual population. Other data sources, such as the number of *Temporary visa holders in Australia*, help government and business plan for tourists and other short-term visitors.

Why are the number of border crossings so much higher than the number of visa grants?

Border crossings capture the number of times the Australian border is crossed. One visa holder may cross the border multiple times during a given period. For example, Australian residents may take a short holiday overseas which is regularly counted as two border crossings.

More information on migration



Pathways from temporary visas to permanent residency



2023 Population Statement

The Centre for Population's latest data, research and analysis on migration can be found at www.population.gov.au.

Recent publications

- 2023 Population Statement – analyses the past year of population change and includes projections of the population over the next decade.
- Pathways from temporary visas to permanent residency – using the cohort of migrants that arrived in 2006–07, this quick guide provides a case study into the different pathways that temporary migrants take through Australia's migration system to become permanent residents.
- Overseas Migration, 2021-22 – this release expands on the data presented in the latest National, state and territory population, released on 15 December 2022, by providing net overseas migration by visa and by country of birth.

Centre for Population data sources on migration

- 2023-24 Budget national, state and territory population projections

ABS data sources on population

- Census of Population and Housing – the most comprehensive snapshot of the country that tells us about the economic, social and cultural make-up of Australia.
- National, state and territory population – statistics about the population and components of change (births, deaths, migration) for Australia and its states and territories.
- Overseas Migration – statistics on Australia's international migration, by state and territory, country of birth, visa, age and sex.

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