

2 Indigenous well-being, statistical frameworks and data governance

This chapter presents an overview of the well-being of Indigenous Australians at a national and sub-national level and makes recommendations on how to improve statistical frameworks and data governance. The chapter begins by profiling Indigenous socio-economic and demographic trends. This analysis reveals the challenges for development in rural remote areas, diversity of outcomes across all types of regions, and reinforces the need for a place-based approach to Indigenous economic development policies. The chapter then assesses how to improve the quality of Indigenous statistics and support community-based approaches to indicators and data. This includes coverage of issues such as statistical definitions, business data, incorporating Indigenous values and perspectives into statistical frameworks, and Indigenous data sovereignty.

Assessment and recommendations

Assessment

- Contemporary Indigenous economies are embedded in a specific context that emphasises kinship relations, culture, and connection to country. Past government policies resulted in the disruption and loss of traditional territories, and Indigenous Australians were denied the opportunity to earn a decent income, build wealth, and transfer it between generations.
- Over the past 50 years, significant advances have been made in Indigenous rights, including rights to land and development. Indigenous Australians have developed businesses across a range of activities ranging from mining related services, to arts and cultural, and food production.
- Australia's Indigenous population is distinct because of its relative growth, youth, and concentration in rural areas. According to the OECD territorial definition, 48% of the Indigenous population live in predominantly rural regions compared to 17% for the non-Indigenous population.
- Moving beyond national averages and focussing on the sub-national level helps to better understand the nature of Indigenous well-being and inequalities. For example, the gap between the Indigenous and non-Indigenous employment rate is -20 percentage points in predominantly urban regions, and -35 percentage points in predominantly rural regions.
- Indigenous Australians located in rural or low-density economies face a particular set of challenges and opportunities associated with small and dispersed populations, higher transport and communication costs, resource endowments and amenities, and local markets that offer a limited set of goods and services. Policy settings for business and economic development have to be tailored to these relatively unique circumstances.
- Since the 1970s, Australian governments have progressively improved statistics about Indigenous peoples but some gaps remain. For example, there is no common Indigenous business definition in the system of national statistics and this makes it difficult to make accurate statements about the size, composition and trends in this sector.
- The design and organisation of Indigenous statistics is primarily driven by government agencies. The "Closing the Gap" framework focuses on gaps in socio-economic outcomes between the Indigenous and non-Indigenous populations. Statistical products for local Indigenous communities are lacking, and existing survey instruments do not collect sufficiently disaggregated or regular data about issues that matter for Indigenous peoples (e.g. culture and traditional knowledge).
- Indigenous representatives are included in an advisory capacity in regards to the creation and dissemination of statistics by the Australian Bureau of Statistics (ABS). However, support to empower local Indigenous institutions to collect data and use it to inform community decision-making is generally lacking.

Recommendations

National Indigenous statistical frameworks and tools can be improved by:

- Introducing a consistent Indigenous business identifier that acknowledges the stage of maturity of the Australian Indigenous business sector, into the Australian business registry system, the tax office, and business surveys undertaken by the ABS.
- Increasing the frequency of the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) from six to every four years to provide more timely data about Indigenous

populations; or consider re-aligning the ABS survey model to streamline NATSISS and the 6 yearly NATSIHS (National Aboriginal and Torres Strait Islander Health Survey) sample and questionnaire content into a single survey enumerated on a more regular basis.

- Working with Indigenous organisations and community representatives to develop indicators and data by remoteness category related to subsistence, access and use of traditional lands and waters, and internet access and use (potentially by increasing the scope of NATSISS).
- Ensuring the monitoring of progress through “Closing the Gap” includes disaggregated analysis and reporting by remoteness category, and compares progress for Indigenous peoples across different types of regions.
- Working with Indigenous organisations and community representatives to develop some pilots on statistical reporting based on the traditional boundaries of language and social groups.

Increasing access to local data that can be used by Indigenous groups for community planning by:

- Developing an online platform for local Indigenous communities to disseminate data tools, build capacity, and share lessons and good practices.
- Prioritising support for higher education research into Indigenous data and community and economic development.
- Providing seed funding for Indigenous-led data projects and development of local indicators, data analytics and GIS capabilities (including continuing the partnership work of Geosciences Australia and the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and promoting philanthropic and private sector co-investment in these efforts).
- Work with State and Territory Governments to increase availability of data about land use and natural resources.

Strengthening Indigenous data governance by:

- Supporting Indigenous-led institutions to develop data governance models, research ethics guidelines, and protocols for data use and sharing.
- Removing administrative barriers (through changing procurement rules, service agreements, data sharing protocols) to enable the sharing of data between service providers and Aboriginal organisations (e.g. to support collaborative initiatives such as Empowered Communities).
- Embedding data and analytical capacities into the National Indigenous Australians Agency (NIAA) regional network to provide support for rural remote communities to utilise data in planning and decision-making.
- Ensuring the monitoring reports on the Partnership Agreement on Closing the Gap includes a component on progress in improving Indigenous statistical frameworks, addressing data linkage issues, and supporting Indigenous data sovereignty.

Introduction

This chapter presents an overview of the well-being Indigenous Australians at a national and sub-national level. The chapter contains two parts. Part 1 deals with the analysis of Indigenous well-being and has four elements. First, Indigenous economies are located in an historical and cultural context. Contemporary socio-economic outcomes for Indigenous peoples cannot be separated from their distinct culture, and a history of dispossession and assimilation. Second, key demographic trends including the growth and composition of the population and its spatial distribution, are discussed. Third, the OECD well-being framework is used to assess Indigenous well-being outcomes at a national level, including comparisons with other jurisdictions. Fourth, analysis is undertaken of Indigenous well-being at a sub-national level, between States and Territories, and between urban, intermediate and rural regions. This analysis reveals the challenges for development in rural remote areas, diversity of outcomes across all types of regions, and reinforces the need for a place-based approach to Indigenous economic development policies. Part 2 of the chapter assesses how to improve the quality of Indigenous statistics and support community-based approaches to indicators and data. This includes coverage of issues such as statistical definitions, business data, incorporating Indigenous values and perspectives into statistical frameworks, and Indigenous data sovereignty.

Box 2.1. A note on method and the territorial classification

The analysis benchmarks the main demographic trends and well-being outcomes at national and sub-national level (TL2 and TL3) against non-Indigenous peoples, and compares them with outcomes for Indigenous peoples in Canada and the United States. Throughout this chapter, both the OECD typology and the Australian Standard Geographical Classification System will be referenced.

This chapter uses evidence drawn from the Australian Bureau of Statistics Census and other sources such as National Aboriginal and Torres Strait Islander Social Survey, 2014-15. The Census is performed every 5 years. Data from the NATSISS defines territories on the basis of Australian Standard Geographical Classification System by the Australian Bureau of Statistics (ABS). The classification distinguishes five classes of remoteness which are the following: Major Cities of Australia, Inner Regional Australia, Outer Regional Australia, Remote Australia and Very Remote Australia.

The OECD has developed a regional typology of Territorial Level 2 (large regions, TL2) and Territorial Level 3 (small regions, TL3) regions to compare regional performance across member countries. In Australia, TL2 is equivalent to a State and Territory, and a TL3 to an SA4 (labour market region) (Annex A).

The OECD taxonomy defines TL3 regions as predominantly urban, intermediate and predominantly rural. The OECD scheme distinguishes between two levels of geography within countries: a local community level and a regional level. Local communities are defined as basic administrative units or small statistical areas. They are classified as either predominantly rural or predominantly urban using a population density threshold. In a second step, TL3 regions, which correspond to larger administrative units or functional areas, are defined as predominantly urban, intermediate or rural with a criterion measuring the share of population living in rural communities.

The first step in the OECD territorial typology is that of classifying “local units” (administrative entities at a geographical level lower than TL3) as rural if their population density is below 150 inhabitants per km². In a second step, the local units are aggregated into TL3 regions and classified using the percentage of population living in rural local units as:

- “Predominantly urban” (proportion of regional population living in rural local units is below 15%).
- “Intermediate” (proportion of regional population living in rural local units is between 15% and 50%).
- “Predominantly rural” (proportion of regional population living in rural local units is greater than 50%).

A third step takes into account possible reclassification of predominantly rural and intermediate units based on the population size of their main agglomeration.

- Intermediate regions are re-classified as predominantly urban if they have an urban centre with a population more than 500 000 people that is greater than 25% of the regional population.
- Rural regions are re-classified as intermediate if they have an urban centre of more than 200 000 people which is greater than 25% of the regional population.

Finally, rural regions are differentiated as “Predominantly rural close to cities” and “Predominantly rural remote” depending on whether 50% of the regional population are within 60 minutes driving time to an urban locality of more than 50 000 people.

Source: Brezzi, M., L. Dijkstra and V. Ruiz (2011^[1]), “OECD Extended Regional Typology: The Economic Performance of Remote Rural Regions”, <http://dx.doi.org/10.1787/5kg6z83tw7f4-en>.

Indigenous economies in a historical context

Pre-settlement economy

Contemporary Indigenous economies within an historical and cultural context. Many Indigenous peoples say they have been in Australia since the land was created. Contemporary western scientific evidence currently suggests that mainland Australia was first settled by Indigenous peoples approximately 65,000 years ago, with Torres Strait Islanders first living and hunting in the islands to the north soon after the islands formed around 7 000 years ago (Matthews, 2016^[2]; Clarkson et al., 2017^[3]). The period prior to colonisation in 1788 has long been characterised as hunter-gatherer societies. These societies were organised around different clans that occupied particular territories. The use of land and water by different clans were governed by rituals and spirituality, which emphasised kinship and connection. For some Indigenous peoples these close connections to country continue to this day (Box 2.2). This belief system is based on the idea that the land was created by ancestors during the dreaming which in essence is timeless because ancestral spirits live on in the landscape. This has different origins to the Judeo-Christian belief that humans are distinct from other species (because they have a soul), and God created nature for humans to have mastery over. Although there is a debate about different interpretations of the scripture (Hitzhusen, 2007^[4]), the Indigenous relationship with nature, mediated through this belief system, implies some differences. These philosophical differences are not absolute or mutually exclusive, but are essential to having insight to how Indigenous peoples relate to land and development issues.

Within the framework of the dreaming and connection to country, an Indigenous economy thrived in the period before white settlement. Each clan had a shared responsibility to look after the country and used fire in sophisticated ways to manage the landscape to make hunting and food gathering easier and more predictable (Gammage, 2011^[5]). An emerging historiography argues that at least some clans may have developed forms of agricultural and aquaculture systems including sowing plant species and the storing of grains, although such debates turn on the definition of boundaries between agriculture and hunter-gatherer modes of production (Pascoe, 2015^[6]). Clans specialised in different activities based on their resource

endowments and technological advantages, and traded in products such as ochres, stone axes, pearls and boomerangs. From the 1600s, Indigenous groups in northern Australia also participated in trading relationships with Indonesians engaged in trepang fishing for the Chinese market (Blair and Hall, 2013^[7]). It is impossible to now know the precolonial population of mainland Australia with any degree of precision, but it has been estimated at between 250 000 and around one million people (Hunter, 2014^[8]).

Box 2.2. Indigenous connections with country

“The land has everything it needs. But it couldn’t speak. It couldn’t express itself. Tell its identity. And so, it grew a tongue. That is the Yolngu. That is me. We are the tongue of the land. Grown by the land so it can sing who it is. We exist so we can paint the land. That’s our job. Paint and sing and dance. So it can feel good to express its true identity. Without us it cannot talk. But it is still there. Only silent.

People should listen and learn and understand, because this is what Australia means. Australia has patterns and designs and stories, and objects beyond that. Australia has a culture, a significant culture for both worlds. For blackfella and whitefella to know about and to understand. What is the meaning of blue-white water in the sea? And the green ferrying water running from the inland? And also the aggy baggy blue water inland? It is all meaningful, and they all have stories, songs, patterns and designs. And this is what I say; this knowledge is a document and our titles for our country.

But we are on a different territory today when new things are coming into our lives, like mining and money affairs. Sometimes this makes Yolngu people move away and not care about what belongs to us. But we need to care for our bays and rivers, water holes and rocks – it is a very powerful part of our connections and titles that we remain to care for those countries.”

Djambawa Marawili AM, a leader of the Madarrpa clan, Yolngu people, and Member of the Prime Minister of Australia's Indigenous Advisory Council

Dispossession, protection and assimilation

The British created a permanent settlement at Sydney Cove in 1788, which was based on the principle of terra nullius (no one's land). The colonisation process involved frontier violence and dispossession, including organised state-sponsored campaigns under a series of colonial regimes. Although there were some accommodations and interdependencies, the effects of colonisation on the economies of Indigenous peoples were profound and ongoing (Keen, 2010^[9]). The colony initially started as a penal settlement, and agriculture spread into the hinterland (Sydney basin and the Hawkesbury) to order to supply the settlement. From the 1820s, the export of fine wool and other agricultural commodities to Britain and European market stimulated further settlement of the land and expansion of the agricultural frontier (Butlin, 1994^[10]). The discovery of gold and other minerals and metals from the 1840s gave further impetus to the development of the colonial economy. Pastoral and mining industries require land and this had a devastating impact on Indigenous economies and societies. Land management regimes were disrupted, agricultural and aquaculture systems were destroyed, and successive generations were alienated from economic resources and the capacity for self-provisioning (Goodall, 1996^[11]). At the same time, the acquisition of land had rapidly increased the wealth and power of settler colonists and, consequently, their control over Aboriginal peoples' lives. By the time of the federation of Australia in 1901, the Indigenous population had likely declined to around 100 000 (Smith, 1980^[12]).

During the 19th century, many Indigenous peoples effectively became wards of the State and religious institutions. One consequence was that Indigenous peoples did not have the opportunity to acquire assets, build wealth, and earn decent wages. Protection laws, first enacted under the various colonies before Australian federation, stressed that government had a duty to protect Indigenous peoples, who it believed

were dying out. Reserves and Christian missions for Indigenous peoples were established from the early 1800s, and the colonies employed Aboriginal ‘Protectors’ or Protection Boards – ostensibly to provide protection but with total control over Indigenous peoples’ lives and, in many cases, legal guardianship over the children (Australian Institute of Aboriginal and Torres Strait Islander Studies, 2019^[13]). This system eventually allowed for the removal of many Indigenous children from their families and their placement into ‘training’ institutions where they were systematically denied access to kin and culture – these people have come to be known as the Stolen Generations (Australian Human Rights Commission, 1997^[14]).

At Federation in 1901, the Australian constitution made exclusionary references to Aboriginal people, effectively leaving their welfare in the hands of the state governments. The population of Indigenous people of mixed descent was increasing, and there was a new policy imperative for mixed descent people to move off government rations and join the workforce. Governments believed that the mixed descent population could ‘merge’ with the non-Indigenous majority (Australian Human Rights Commission, 1997^[14]). Protectors and Protection Boards had authority to indenture wards to jobs off the reserves such as in domestic work. Many people forced into these employment relationships were further disadvantaged through the withholding of wages and allowances that were held in trust by state officials but, in many cases, never distributed to the workers (Australian Senate, 2006^[15]). Indigenous peoples were also working in the pastoral industry, where station managers often paid low or no wages (Rowse, 2017^[16]).

From the late 1930s the policy focus on ‘merging’ became a more active policy of ‘assimilation.’ This would ostensibly involve improving the socio-economic condition of Indigenous peoples so they could ‘take their place economically and socially in the community’ – in theory leading to a dissolution of distinct groups (Australian Human Rights Commission, 1997^[14]). However, approaches to development continued to be discriminatory and excluding. Indigenous peoples continued to be ineligible for social security payments. Following the First World War, returning Indigenous servicemen were excluded from the ‘soldier settlement’ schemes that granted blocks of land to other returning soldiers (The Australian War Memorial, 2019^[17]). In addition, until at least the mid-1970s the rights of Indigenous people to access loans were severely restricted, including loans to establish businesses or secure mortgages to enter the private housing market (Whitlam Institute, 2015^[18]). Indigenous people were not only forced to endure many waves of trauma and dispossession, but they were also simultaneously denied an economic base and the capacity to accrue economic resources to pass on to future generations.

Resistance and rights to development

During this period Indigenous people were also organising to resist these policies and take back control over their lives. These actions enabled Indigenous peoples to achieve greater equity in the labour market and build assets. From 1946 Aboriginal pastoral workers – supported by a number of unions – commenced industrial action to demand higher pay (Rowse, 2017^[16]). Twenty years later, a decision was made by the Commonwealth Conciliation and Arbitration Commission in 1966 to award equal wages to male Aboriginal employees of cattle stations in the Northern Territory, but the slow phasing in of this arrangement and deeper concerns about land rights prompted further industrial action. While some Indigenous Australians had been allowed to vote in Australian government elections since 1949, from 1962 all Indigenous Australians became eligible to vote at the Commonwealth level. Changes brought in between 1941 and 1959 also allowed most Indigenous peoples to receive social security payments (though still largely excluding those living in remote areas) (Rowse, 2017^[16]). In 1967, over 90% of the Australian voting population agreed to constitutional changes that allowed Indigenous peoples to be fully included in the national census, and gave the Australian government power to make laws for Indigenous peoples.

From this period, legislative frameworks have been introduced that enable Indigenous peoples to take back control over land assets. Local Indigenous peoples took over control of former missions and reserves, and in some cases returned to traditional lands (Standing Committee on Aboriginal Affairs, 1987^[19]). In 1972, the Australian government announced it would make funds available to purchase properties for

Indigenous people, and in 1975, the new Aboriginal Land Fund Commission acquired land that was returned to the Gurindji people in the Northern Territory. Australia's first comprehensive land rights legislation, the Commonwealth's *Aboriginal Land Rights Act (Northern Territory)* (ALRA) was passed in 1976 (Yunupingu, 1997^[20]; Attwood, 2000^[21]). In the 1980s, Indigenous peoples outside the Northern Territory pressed for land rights legislation similar to the ALRA that recognised inalienable freehold title. Land rights laws were implemented incrementally in six out of eight states and territories.

Two key judgements by the High Court of Australia (*Mabo v Queensland* in 1992 and *Wik peoples v Queensland* in 1996) led to national recognition of Indigenous land rights and the creation of legal mechanisms to reclaim land, and therefore build assets. The *Mabo* decision recognised Indigenous common law rights in land, so long as such rights had not been overridden by the Crown. An administrative process for claiming these 'native title' rights was introduced – and the rights themselves intentionally limited – by the Commonwealth *Native Title Act 1993*. In many cases, native title only recognises use rights including rights to hunt, gather, fish and hold ceremonies on land. Exclusive possession native title (where there has been no extinguishment) allows native title holders to control access to their native title lands and waters (except for mineral exploration and extraction); non-exclusive possession (where there has been partial extinguishment) does not. The Indigenous Land Corporation was established in 1995 with a remit to purchase lands and waters for Indigenous Australians who are unable to claim these back through native title and land rights, and to manage those lands and waters in a manner that will provide economic, environmental, social and cultural benefits to the Indigenous land and sea owners (Jordan, Markham and Altman, 2019^[22]). In 1996, the High Court *Wik* decision found that pastoral leases did not give exclusive possession and therefore native title could co-exist with these lease arrangements. In response to this decision, in 1998, the Government amended the *Native Title Act*, and introduced Indigenous Land Use Agreement (ILUA) provisions. This provides a set of mechanisms for voluntary agreement making between Indigenous peoples (as traditional owners of land), governments, resource developers and other stakeholders in relation to native title matters and land-use concerns (Smith, 1998^[23]). As at 31 December 2017, Native Title Determinations covered a total area of about 2 605 983 sq. km or 36.5% of the land mass of Australia, and at that time a further 28.1% of Australian land was subject to a claimant application for Native Title (Department of the Prime Minister and Cabinet, 2018^[24]).

Moving to a (limited) post-settlement future

The economic history of Indigenous Australians is complex and difficult to summarise. However, the contemporary socio-economic outcomes of Indigenous Australians have to be understood within this historical context. For around 65,000 years, Indigenous economies were based on clans crafting the landscape to hunt, cultivate and gather food within defined territories. Trade was conducted to access technologies to support these economies and the societies they sustained. From 1788, the asset base of this economy was progressively stripped after white settlement, which enabled Australia to build its wealth based on pastoral and mining activities. For the next 180 years, until the late 1960s/ early 1970s, Indigenous peoples were denied the right to have a say over political and policy decisions that affected them, and effectively became wards of state and religious institutions with policies based on protection and then assimilation. The social structures and connection to land that had sustained Indigenous peoples for thousands of years was disrupted and, in many cases, destroyed. These arrangements and practices effectively denied the possibility of an equitable accommodation or transition, and Indigenous peoples the opportunity to earn income, receive benefits, and build intergenerational wealth. Over the last 50 years, Indigenous peoples in Australia have fought for and reclaimed rights over decisions that affect their lives and their rights to land and economic development. Statutory land rights regimes at a State level, Commonwealth *Aboriginal Land Rights Act (Northern Territory) Act*, and *Native Title Act* have created a set of mechanisms that enable Indigenous peoples to reclaim land for cultural purposes. Spiritual beliefs and cultural practices cannot be separated from livelihoods and the economy, and these Indigenous property rights provide a basis for Indigenous economic development (Altman, 1995^[25]; Scott, 2006^[26]).

With the right support, this limited post-settlement future presents opportunities to re-build Indigenous economies.

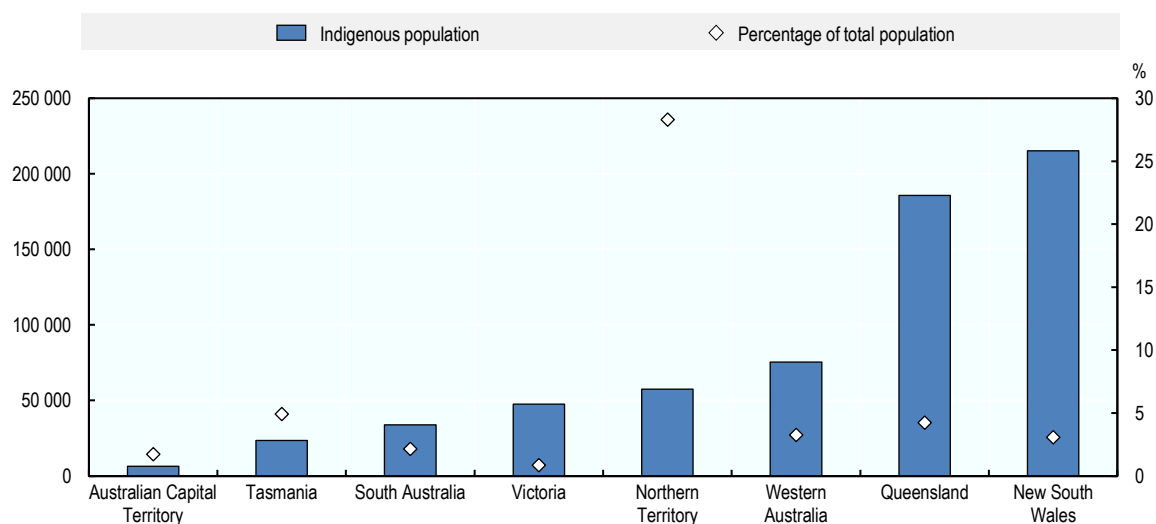
Demography

Size and distribution of the Indigenous population

Indigenous Australians corresponds to a relatively small share of the total population. The size and composition of this population can only be estimated approximately with a low degree of confidence. Population estimates are based on the Australian Bureau of Statistics (ABS) national census that is conducted every five years. Because estimates of the Indigenous population are based on self-identification or identification by a household member of 'Aboriginal and/or Torres Strait Islander origin', the Indigenous population construct is produced through the interplay of an array of political, administrative and cultural factors (Rowse, 2006^[27]). Consequently, official estimates of the Indigenous population are likely to be underestimates of the entire group of people who have any Indigenous ancestry. Nevertheless, 649 171 people were identified as Indigenous in the 2016 Census (2.8% of all census records), with adjustments for survey-based estimates of those missed in the enumeration process bringing the official population estimate up to 798 000 (3.3% of the Australian population) (Markham and Biddle, 2018^[28]). Among Indigenous Australians, about 91% identified themselves as Aboriginal, and 5% as Torres Strait Islanders and 4% as both Aboriginal and Torres Strait Islanders.

Even though Indigenous Australians represents small part of the population at a national level, in some States and Territories, Indigenous peoples presents a significant share of the population. New South Wales is the state with the largest number of Indigenous peoples, with more than 200 000 Indigenous peoples living inside the state's boundaries (Figure 2.1). The state with the second largest Indigenous populations is Queensland with a total Indigenous population of 185 000. Although these two states have the largest Indigenous population, the Indigenous populations represent less than 5% of the both state's population. Northern Territory is the jurisdiction in Australia with the largest share of Indigenous population of the total population, where the Indigenous population account to 28% of the Territory's total population. The other states and territories' share of Indigenous populations varies from 1.7% (Victoria) to 4.9% (Tasmania).

Figure 2.1. Population distribution by states and territories, 2016



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Box 2.3. Distribution of the Indigenous population at the TL2 level (Australia, Canada, Mexico, New Zealand and the United States)

The high geographical concentration and the share of Indigenous people highlight the significant role of Indigenous peoples in some OECD regional economies. Approximately three-quarters of all Indigenous peoples concentrate in one-third of all TL2 regions in the five selected countries (38 TL2 regions). Table 2.1 highlights the significance of Indigenous peoples in certain regions. Within these regions, the share of Indigenous population varies from 1.66% (California) to 85.86% (Nunavut). In regions such as the Northwest Territories and Nunavut (Canada), Oaxaca (Mexico), Yucatán (Mexico), Indigenous people represent more than 50% of the total regional population. Defined by the number of Indigenous populations living in the region, the region with the largest estimated number of Indigenous peoples is found in the State of Mexico, Mexico with its total Indigenous population of 2 751 672.

Table 2.1. TL2 regions with the greatest share and size of Indigenous peoples (Australia, Canada, Mexico, New Zealand and the United States)

OECD member countries	Top TL2 region	Population	% Indigenous population of the region	% of total national Indigenous population
Australia	Northern Territory	58 806	27	9
	New South Wales	216 000	3	34
Canada	Nunavut	30 550	86	2
	Ontario	374 395	3	22
Mexico	Oaxaca	2 608 093	66	10
	State of Mexico	2 751 672	17	11
New Zealand	Gisborne	19 683	49	3
	Auckland Region	163 920	12	24
United States	Alaska	147 356	20	2
	California	1 081 543	3	16

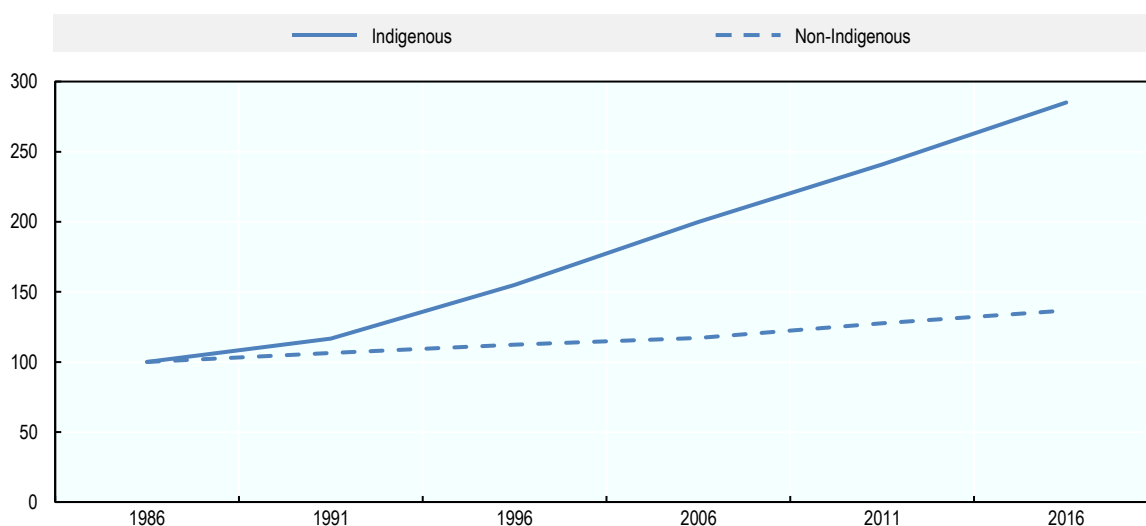
Note: The Indigenous population data of the United States refers to the Indigenous population identified as American Indian and Alaska Native, alone or in combination.

Source: Data is based on Census of Population and Housing, 2016 (database), TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>; Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start>; INEGI (n.d.^[31]), *Estimadores de la Población Total y su Distribución Porcentual Según Autoadscripción Indígena por Entidad Federativa, Sexo y Grandes Grupos de Edad [Total Population Estimators and Their Percentage Distribution according to Indigenous Self-identification]*, 2016 for Mexico; Statistics New Zealand (n.d.^[32]), *2013 Census (database) for New Zealand*; U.S. Census Bureau (n.d.^[33]), *2012-2016 American Community Survey 5-Year Estimates*, Table PEPASR5H, using American FactFinder for the United States.

The Indigenous population is growing

Since the 1971 Census, there has been a clear rising trend in the counts of Aboriginal and Torres Strait Islander people in each successive Census (Department of the Prime Minister and Cabinet, 2018^[24]). In 1971, the Indigenous population was estimated to be 150 000, far less than the estimate of 800 000 today. A very large increase was measured between the 1991 and 1996 Censuses (33%), between the 2006 and 2011 Censuses (21%), and again between the 2011 and 2016 Census (18%). Between 1986 and 2016, the growth index of the Indigenous population was 285, which was more than twice as high as the growth index of non-Indigenous population that stood at 137 (Figure 2.2). The change in the population between 1971 and 2016 implies an annual compound growth rate of 3.75%, far beyond the bounds of natural increase (Markham and Biddle, 2018^[28]). Rapid increase is likely to continue, with the population projected to reach between 1.2 million and 1.6 million by 2041 (Markham and Biddle, 2018^[34]).

Figure 2.2. Demographic change of Indigenous and non-Indigenous peoples, 1986-2016



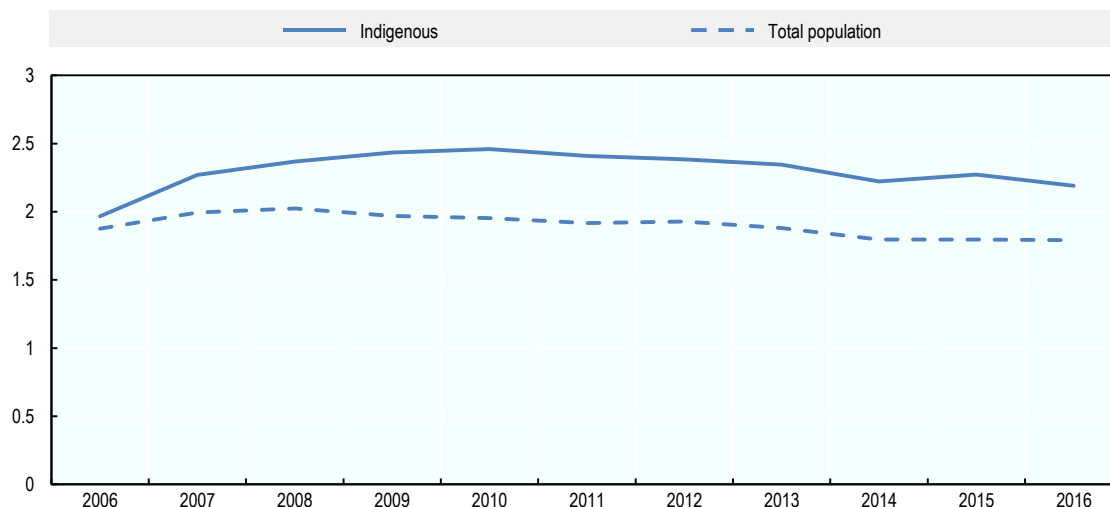
Note: Growth index, 1986=100 line.

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

The rapid population growth of Indigenous peoples has been greater than that can be explained by demographic factors (births, deaths and migration) alone. In fact, the increase of 21% in the Indigenous Australians count from the 2006 Census to the 2011 Census, 70.2% could be explained by natural demographic change (including births and deaths) and migration and the rest 29.8% remains unexplained. However, between the 2011 and 2016 censuses, the share of unexplained factors decreased. Indeed, in 2016, the share of unexplained change in Indigenous counts was 21.4%. The ABS has listed the following factors that influences the change in Indigenous populations' counts: coverage, response rates and propensity to identify (Australian Bureau of Statistics, 2018^[35]). Propensity to identify is considered one of the factors influencing the calculation of the size of the Aboriginal and Torres Strait Islander population as changing social norms increase the likelihood that people will self-identify (Biddle and Markham, 2018^[36]). Similar trends have been experienced over recent decades in Canada, New Zealand and the United States (Balestra and Fleischer, 2018^[37]).

Figure 2.3. Fertility rates of Indigenous women, 2006-16

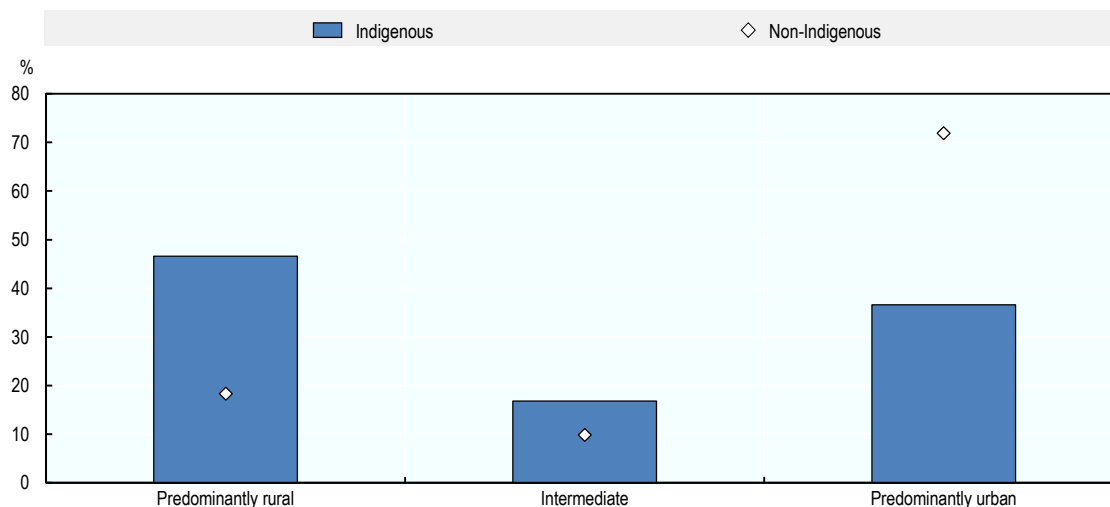
Number of children born to women



Source: Data drawn from Australian Bureau of Statistics (2016^[38]) Births dataset, Australia (cat. no. 3301.0), available from the ABS website, <http://stat.data.abs.gov.au/>.

A relatively higher proportion of Indigenous Australians live in rural regions

Indigenous Australians are more concentrated in the predominantly rural regions than in other types of regions. In 2016, Indigenous peoples represented about 7% of the total population of rural Australia. On the contrary, the share of Indigenous peoples of the total population of urban regions in Australia is 1.5%. Based on to the latest census data, 48% of the Indigenous peoples live in predominantly rural regions and that is about 10 percentage points higher than the share of Indigenous peoples living in urban regions. In 2016, the share of non-Indigenous peoples living in rural regions stood at 17%, which was approximately 28 percentage points lower than the share of Indigenous peoples living in rural regions.

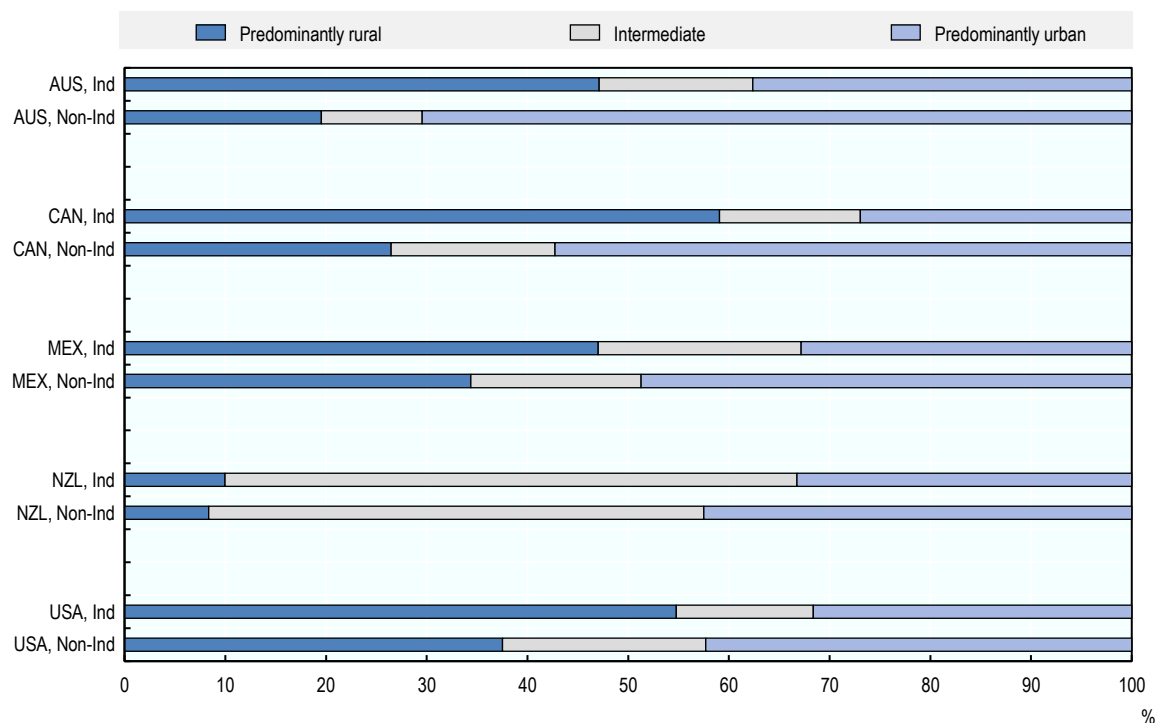
Figure 2.4. Population distribution by type of region, 2016

Note: Based on the OECD Territorial Classification.

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

The relative concentration of Indigenous peoples in predominantly rural and intermediate regions (compared to the non-Indigenous population) is common with Canada, Mexico, New Zealand and the United States. On average, 44% of the Indigenous peoples in these countries and Australia live in predominantly rural areas (Figure 2.5). On the contrary, 30% of the total Indigenous populations of the five OECD countries live in urban areas, about 25 percentage points less than the share for the non-Indigenous population living in urban areas. About 5% of the total urban population across these five countries is Indigenous, and for the rural population it is 8%.

Figure 2.5. Distribution of Indigenous population by type of region and country, 2016



Ind: Indigenous.

Non-Ind: Non-Indigenous.

Source: OECD calculations based on data from on Australian Bureau of Statistics (ABS), 2016 Census of Population and Housing (database), TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>; Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start>; Minnesota Population Center (2018^[39]), *Population and Housing Census*, Integrated Public Use Microdata Series, <https://international.ipums.org/international/>; INEGI (n.d.^[31]), *Estimadores de la Población Total y su Distribución Porcentual Según Autoadscripción Indígena por Entidad Federativa, Sexo y Grandes Grupos de Edad [Total Population Estimators and Their Percentage Distribution according to Indigenous Self-identification]*, 2016 for Mexico; Statistics New Zealand (n.d.^[32]), *2013 Census (database) for New Zealand*; U.S. Census Bureau (n.d.^[33]), *2012-2016 American Community Survey 5-Year Estimates*, Table PEPASR5H, using American FactFinder for the United States, Tables B01001A, B01001B, B01001C, B01001D using American FactFinder for the United States.

Box 2.4. Population distribution under the Australian Bureau of Statistics classification

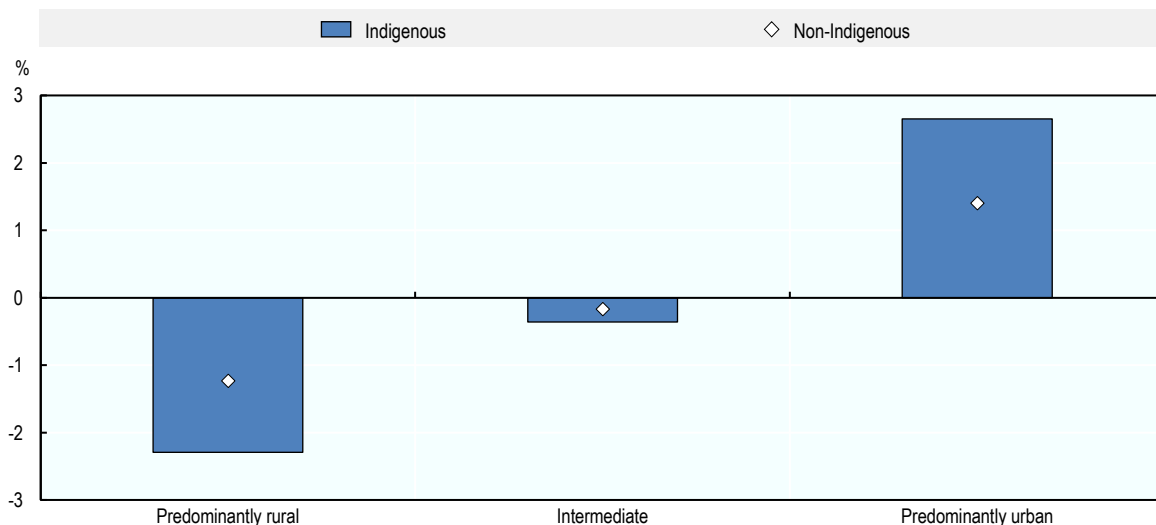
The Australian Standard Geographic Classification (ASGC) remoteness structure is defined in census years and covers 5 classifications: Major Cities, Inner regional, Outer regional, Remote, and Very remote. The Indigenous population is much more likely than the non-Indigenous population to live in what the Australian Bureau of Statistics (ABS) term 'Remote' and 'Very Remote' parts of Australia. Remoteness, in this classification, is based on relative distance to large population centres. However, only a minority of Indigenous people live in remote Australia (18.7% in 2016). By 2041, the remote Indigenous population is projected to increase by around 35,000 persons, but fall to between 11.7% and 14.8% of the total Indigenous population.

Source: Markham, F. and N. Biddle (2018^[34]), *Indigenous Population Projections, 2016-2041*.

The share of Indigenous peoples living in predominantly rural regions is declining

Although majority of the Indigenous peoples live in predominantly rural areas according to OECD TL3 typology, the share of Indigenous peoples living in rural regions is decreasing. As seen in Figure 2.6, in 2011-16 the share of Indigenous peoples living in rural regions decreased by two percentage points. In 2011-16, the share of Indigenous peoples living in urban regions increased by 3 percentage points. Indigenous population increase is greater in urban areas due to higher rates of partnering with non-Indigenous people and statistical identification change in non-remote locations (Jordan, Markham and Altman, 2019^[22]).

Figure 2.6. The change in distribution of Indigenous and non-Indigenous population by type of region, 2011-16

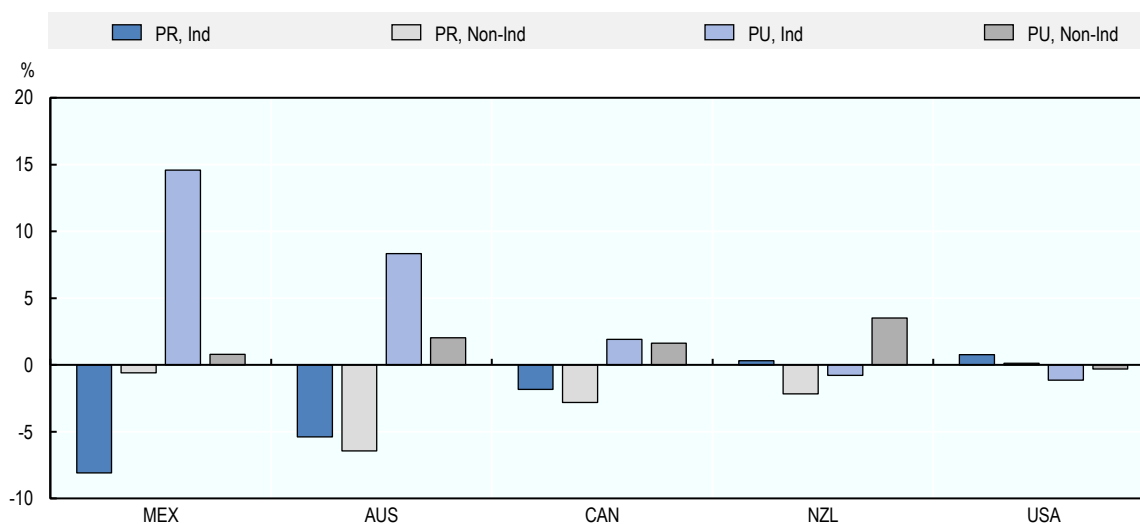


Source: Data drawn from Australian Bureau of Statistics (2016) Time Series comparison of ASGS 2016 Australia/State/GCCSA/SA4/SA3/SA2 based data for Sex by Age by Indigenous Status across 2016 and 2011, 2016 Census of Population and Housing and 2011 Census of Population and Housing, available from the ABS website, <http://stat.data.abs.gov.au/Data>

This urbanisation trend for the Indigenous population is similar to Canada and Mexico (Figure 2.7). In the case of Canada, the increase in the urban population of Indigenous people in Canada is mainly due to

increases in self-identification, particularly for the Métis population (Survey response to OECD, Canada, 2018). Across the five sample countries (Australia, Canada, New Zealand, Mexico and the United States) the share of Indigenous people in urban regions increased (4.6%) while those in rural areas declined (-2.8%) in the period 2011-16. A similar pattern is observed in the change in the distribution of non-Indigenous peoples over the same time across these five countries: urban regions experienced an increase in the share of the population of non-Indigenous peoples (1.5%) while rural regions experienced a decrease (-2.3%) in the share of the non-Indigenous population.

Figure 2.7. Growth rates of Indigenous and non-Indigenous populations in urban and rural regions



PR: predominantly rural; PU: predominantly urban; Ind: Indigenous; Non-Ind: non-Indigenous.

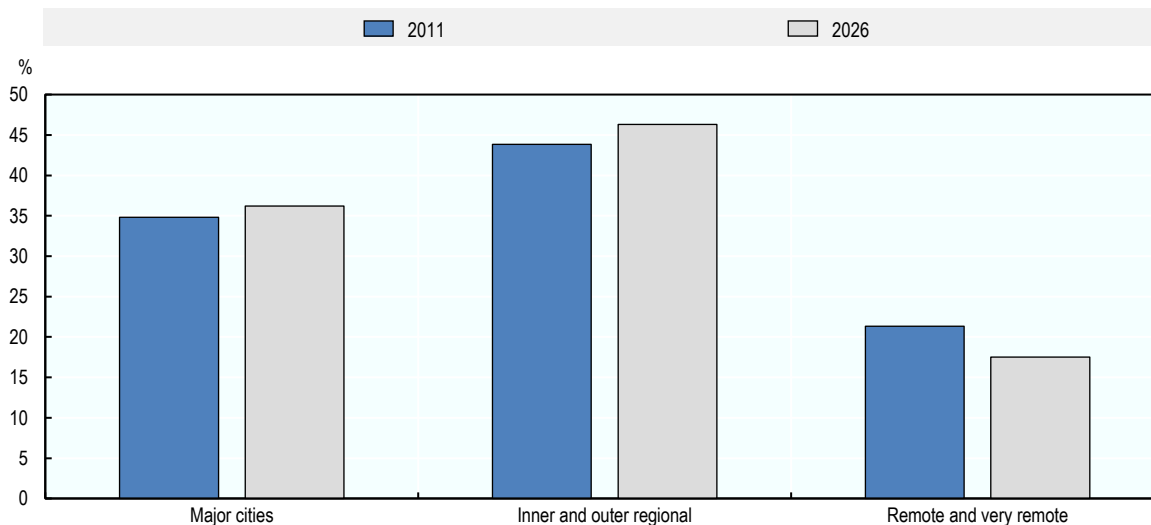
Note: Data refers to 2010 and 2015 for Mexico; 2006 and 2013 for New Zealand; and 2010 and 2016 for the United States.

Source: OECD calculations based on data from on Australian Bureau of Statistics (ABS), Census of Population and Housing, 2011 and 2016, TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>; 2016 Census of Population and 2011 National Household Survey, products of Statistics Canada in Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start> for Canada; Minnesota Population Center (2018^[39]), *Population and Housing Census*, Integrated Public Use Microdata Series, <https://international.ipums.org/international/>; INEGI (n.d.^[31]), *Estimadores de la Población Total y su Distribución Porcentual Según Autoadscripción Indígena por Entidad Federativa, Sexo y Grandes Grupos de Edad [Total Population Estimators and Their Percentage Distribution according to Indigenous Self-identification]*, 2016 for Mexico; Statistics New Zealand (n.d.^[40]), *NZ.Stat (database)*, <http://nzdotstat.stats.govt.nz/wbos/index.aspx>, 2006 and 2013 Census (database) for New Zealand; and U.S. Census Bureau (n.d.^[33]), *2012-2016 American Community Survey 5-Year Estimates*, 2006-2010 American Community Survey 5-Year Estimates and 2012-2016 American Community Survey 5-Year Estimates, Tables B01001A, B01001B, B01001C, B01001D using American FactFinder, <http://factfinder2.census.gov> for the United States.

Indigenous population is expected to grow, especially in non-remote areas

The number of Indigenous Australians is projected to grow strongly in the future. Population projections in 2011 estimated that by 2026 the total Indigenous population of Australia will increase by 36%. This projected growth is uneven across different geographies. According to the ABS remoteness classification, 40% of this growth will be in major cities, 53% in inner and outer regional areas, and 7% in remote or very remote areas. As a result, it is projected that the proportion of the Indigenous population living in remote and very remote areas will decline from 21% to 18% in this period (Figure 2.8).

Figure 2.8. Projected change in proportion of Indigenous population, Australia, by region, 2011-26
2017=100



Note: Based on the ABS remoteness structure.

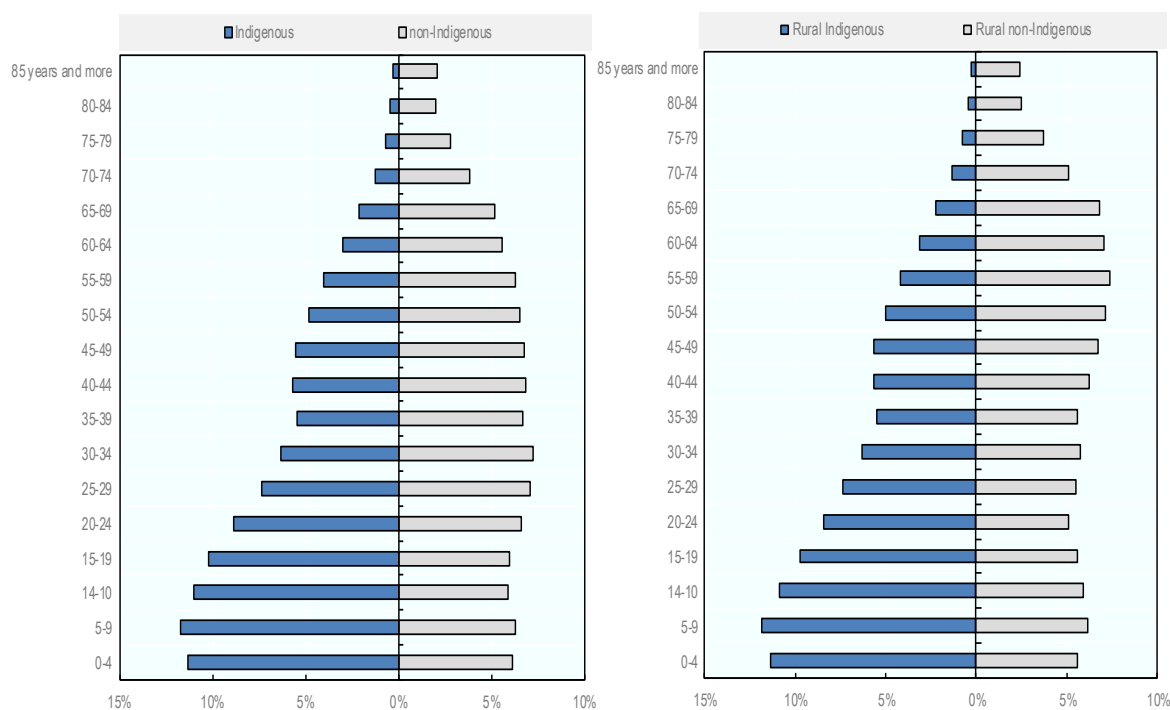
Source: Australian Bureau of Statistics (2019^[41]), *Aboriginal and Torres Strait Islander Population Projections by Indigenous Regions*, http://stat.data.abs.gov.au/Index.aspx?DataSetCode=ABS_ABORIGINAL_POPPROJ_INDREGION# (accessed on 7 July 2019).

Australian Indigenous population is relatively young

Indigenous Australians have a relatively younger population profile compared to the non-Indigenous population. In 2016, the median age of Indigenous Australians was 23 years, which was 15 years lower than the median age of non-Indigenous peoples. Figure 2.9 illustrates the age structure of the Indigenous and non-Indigenous populations at a national level, and within predominantly rural regions. The Indigenous population in predominantly rural regions tend to be younger than Indigenous peoples in other types of regions and non-Indigenous peoples. In 2016, the share of Indigenous peoples aged 14 years and younger was 34% both in predominantly rural regions and at a national level whereas the share of youth of non-Indigenous population stood at 17.7% in predominantly rural regions and at 18.4% at national level.

Figure 2.9. Age pyramid of Indigenous and non-Indigenous peoples, 2016

Share of total population



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

When looking at the share of working age Indigenous peoples in predominantly rural regions and at the national level compared to the share of working age non-Indigenous peoples, there are no significant differences. In 2016, the share of working age Indigenous peoples in predominantly rural regions was 60.9%, which was about 1 percentage points lower than the corresponding share for non-Indigenous peoples. At a national level, the gap in share was slightly higher, 61.3% (Indigenous peoples) compared to 65.9% (non-Indigenous peoples).

The largest differences occur between elderly Indigenous and non-Indigenous populations, especially in predominantly rural regions. In 2016, the share of elderly Indigenous population stood at 5%, which was 15 percentage points lower than the share of elderly non-Indigenous population of 20% in predominantly rural regions. Compared to the national average, in 2016, the share of Indigenous peoples aged 65 and older was 5%, which was 11 percentage points below the national average.

Three factors combine to slow Indigenous population aging (Jordan, Markham and Altman, 2019^[22]). Relatively high Indigenous mortality rates contribute to the population's relative youth, with Indigenous life expectancy at birth being 71.6 years for males and 75.6 years for females (this compares to 80.2 years and 83.4 years for non-Indigenous males and females respectively). More important to population increase are Indigenous fertility rates. The total fertility rate of Indigenous women is 2.1 babies per woman, compared to 1.8 for non-Indigenous women. This is not the full picture, however, as the children of Indigenous fathers and non-Indigenous mothers are also of Indigenous origin, increasing the Indigenous birth rate by a further 41% according to birth registry data (Australian Bureau of Statistics, 2017^[42]).

Summary

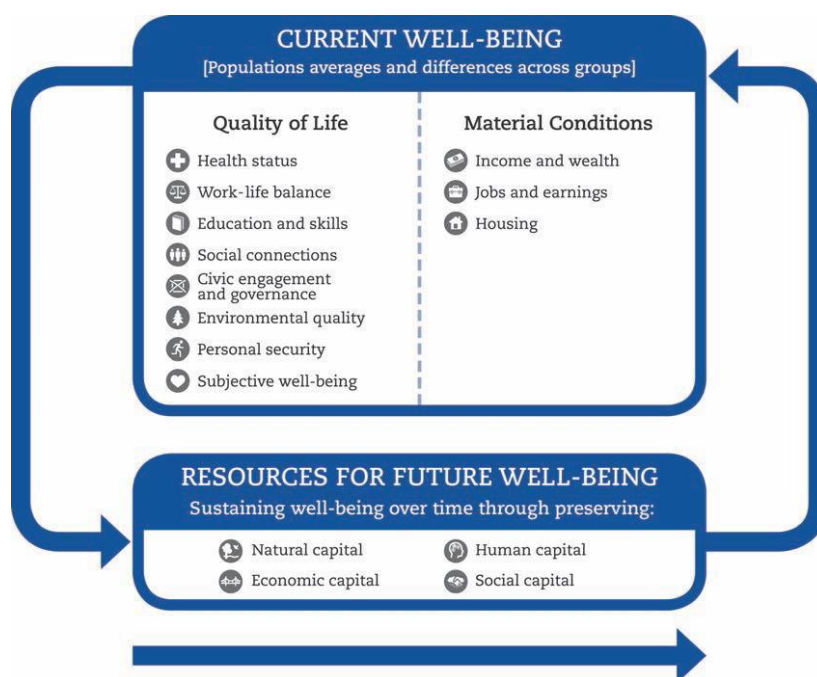
This section has look at major demographic trends of Indigenous peoples at national and sub-national level in an international context. This population group has three distinct characteristics. First, Australia's Indigenous population has grown strongly to 800,000 in 2016 since first recorded at 150,000 in the 1971 Census. Very large increases were measured between the 1991 and 1996 Censuses (33%), between the 2006 and 2011 Censuses (21%), and again between the 2011 and 2016 Census (18%). Higher fertility and mortality rates partly explain this demographic trends and structure along with increased propensity to self-identify. This trend of increasing propensity to self-identify is similar to the experience of Canada, New Zealand and the United States. Second, the population is also relatively younger: in 2016, the median age of Indigenous Australians was 23 years, which was 15 years lower than the median age of non-Indigenous peoples. The proportion of Indigenous youth (aged 14 years and younger) is 34% in predominantly rural regions compared to the non-Indigenous population of 17.7%. Third, Indigenous peoples are more likely to be located in rural regions than the non-Indigenous population (similar to comparable countries). In 2016, Indigenous peoples constituted 3% of Australia's total population. In 2016, Indigenous peoples represented about 7% of the total population of rural Australia. On the contrary, the share of Indigenous peoples of the total population of urban regions in Australia is 1.5%. Over time, the Indigenous population is becoming more urbanised. In 2011-16, the share of Indigenous peoples living in rural regions decreased by two percentage points whereas the share of Indigenous peoples living in urban regions increased by 3 percentage points. This trend is projected to continue into the future.

Economic development and well-being

Well-being outcomes for Indigenous Australians is significantly lower than non-Indigenous Australians

The OECD well-being framework measures individual well-being that is developed from the capabilities approach that conceives development as a process that can expand individual's choices and opportunities to live the lives that they value (Sen, 2005^[43]) (OECD, 2017^[44]). The approach for well-being is people centric and the framework focuses on well-being outcomes rather than inputs (for example educational attainment rather than access to schools or the number of teachers) (Figure 2.10). The framework incorporates 11 dimensions of well-being, which assess the current and future stock levels of individuals' well-being.

Figure 2.10. OECD well-being framework



Source: OECD (2017^[44]), *How's Life? 2017: Measuring Well-being*, <https://dx.doi.org/10.1787/how-life-2017-en>.

Measuring and monitoring well-being is important for many reasons. It helps policy-makers to understand, what the level of quality of life is and is it improving. Typically, measures of well-being are conducted at the national level for the total population. Only few countries have adopted well-being frameworks that are targeted to measure and monitor of Indigenous peoples to guide decision-making (OECD, 2019^[45]). This section uses the OECD-well-being framework to assess the current level of well-being of Indigenous peoples in Australia. The indicators listed in Table 2.2 are considered in the analysis. The analysis compares outcomes between Indigenous peoples and non-Indigenous peoples in Australia, and comparable jurisdictions.

Table 2.2. Indicators comparing Indigenous well-being

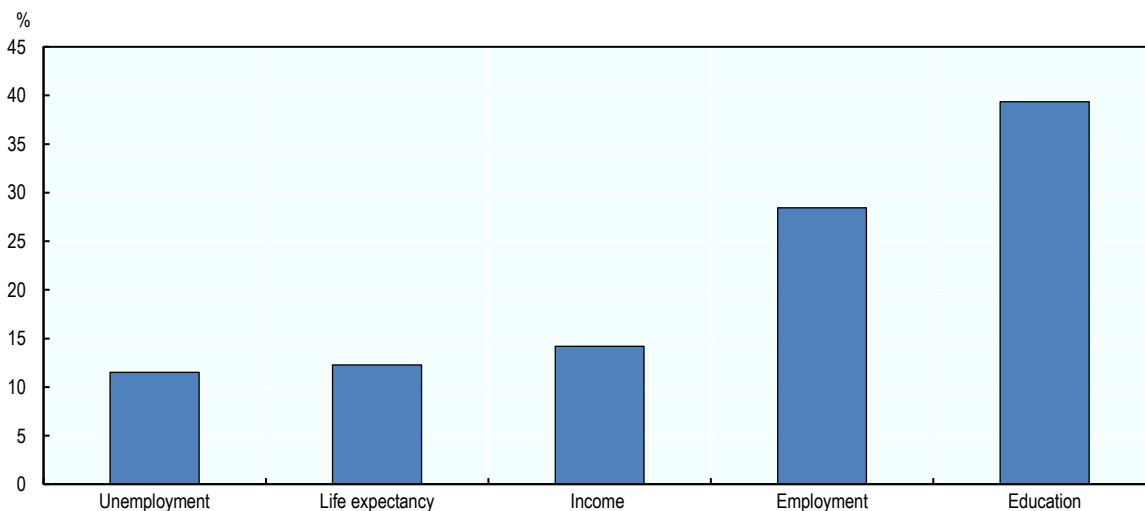
Domain	Indicator
Material conditions	Median income Employment rate Unemployment rate
Quality of life	Life expectancy at birth Share of adult population (25-64) with at least upper secondary education

The analysis of gaps in different well-being dimensions between Indigenous and non-Indigenous peoples sheds light on the significant inequalities that Indigenous Australians face (Figure 2.11). Indigenous peoples have lower outcomes than non-Indigenous peoples in all captured dimensions. The largest gap at a national level is reported in education. Educational attainment (i.e. the level of human capita) is measured by the share of population aged 25-64 with at least upper secondary education. The gap in educational attainment between Indigenous and non-Indigenous peoples is approximately 40 percentage points. Another large gap is reported in employment where the difference between the population aged 15-64 who are employed between the two groups is about 30 percentage points. Moreover, when looking at the health

of Indigenous peoples, the data suggest that Indigenous peoples live on average 10 years less than non-Indigenous peoples.

Figure 2.11. Gaps in selected well-being indicators between Indigenous and non-Indigenous peoples, 2016

Absolute values



Note: The gap in life expectancy represents the gap between the life expectancy of Indigenous peoples and non-Indigenous peoples relative to the life expectancy of non-Indigenous peoples. The gap in income is defined as the difference between median weekly earnings of Indigenous and non-Indigenous peoples relative to median weekly earnings of non-Indigenous peoples.

Source: Calculations based on data received from the ABS.

In an OECD context, Australians enjoys good quality of life and the country ranks among the top performers in dimensions such as income and wealth, jobs and earnings, health and environmental quality. However, these gaps show that when the measures are breakdown by Indigenous and non-Indigenous peoples significant inequalities in well-being emerge. An internationally recognised measure of advantage and disadvantage such as the Human Development Index (HDI) is useful for placing Indigenous disadvantage in context. When last calculated using 2006 data, Indigenous Australians would have been placed 105th out of 177 countries, between the Occupied Palestinian Territories and Fiji, while the total Australian ranking was 3rd from 177 (Yap and Biddle, 2010^[46]).

Relative to other comparable countries, Australia tends to perform worse on key measures in regards to gaps in socio-economic and health outcomes between Indigenous and non-Indigenous Australians (Table 2.3). Participation in the labour market has important implications in many Indigenous peoples' lives as it can provide economic security and increase quality of life. However, the gap in the employment rate of -28 percentage points (employed people aged 15-64, as a percentage of the population of the same age) is much higher than in other settler societies such as Canada (-8 percentage points), and the United States (-13 percentage points). Education has an important role to play in improving Indigenous well-being outcomes and supporting the development of Indigenous communities. Individuals with at least upper secondary degree are more likely to be employed, have higher income and have better health than individuals with lower or no degree. The gap in educational attainment (the share of adult population aged 25-64 with at least upper secondary education) is significant larger in Australia (-39 percentage points) than in other jurisdictions. Differences in gaps between Indigenous and non-Indigenous life expectancy at birth are larger in Australia (-10 years) compared to other countries such as New Zealand (-7 years), the

United States (-4 years), and Canada (-5 years). However, differences in concepts, data and methods make life expectancy comparisons problematic, particularly between Australia and Canada (Australian Institute of Health and Welfare, 2011^[47]).

Table 2.3. Differences in socio-economic and health indicators, Indigenous and non-Indigenous populations, Australia, Canada, New Zealand and United States

Country	Employment rate (percentage points)	Unemployment rate (percentage points)	Educational attainment rate (percentage points)	Life expectancy (years)
Australia	-28	7	-39	-10
Canada	-8	7	-16	-5
United States	-13	7	-9	-4
New Zealand	-14	6	-9	-7

Note: Employment rate: The latest available year is 2013 for New Zealand. For Canada, the employment rate refers to populations aged 15 and over. Unemployment rate: The latest available year is 2013 for New Zealand; and 2016 for Australia, Canada and the United States. For Canada, the unemployment rate refers to populations aged 15 and over. Educational attainment rate: The latest available year is 2013 for New Zealand; and 2016 for Australia, Canada and the United States. For Canada, educational attainment rate refers to populations aged 15 and over. Life expectancy at birth: The latest available year is 2009-11 for the United States; 2010-12 for Australia; 2012-14 for New Zealand; and 2017 for Canada.

Source: Various - see Endnote 1.

It is important to note that the values and perspectives of Indigenous peoples have generally not been incorporated into countries well-being frameworks and policy agendas. Current debates and perspectives about how to better reflect Indigenous values and perspectives in the Sustainable Development Goals is a good example of this (see Box 2.5) (ILO, 2015^[48]). Only a few countries have created frameworks that focus on the well-being of Indigenous people from their perspective (Stats NZ, 2013^[49]; OECD, 2019^[45]). The incorporation of Indigenous values and perspectives into well-being frameworks is vital as it helps policymakers to better tailor policies to the needs and aspirations of Indigenous peoples, and monitor progress over time. This issue will be assessed and discussed further in a later sub-section of this chapter.

Box 2.5. Global approaches to measuring well-being and Indigenous peoples

International legal instruments provide another starting point for considering how to measure well-being and development outcomes for Indigenous peoples. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) was endorsed in 2007 by 144 nations as a universal framework for the basic rights and well-being of Indigenous peoples. The UNDRIP has 46 articles which identify a number of elements which are important when considering place-based economic development issues for Indigenous peoples. This includes rights to participate in decision-making about development, facilitating cross-border trade and economic activities, free, prior and informed consent about development on Indigenous lands, measures that ensure productivity and conservation of Indigenous lands, and maintaining distinct institutions. It also identifies a number of aspects that should be considered when measuring Indigenous well-being such as traditional knowledge and cultural practices, and the maintenance of language.

The UNDRIP was also developed in the context of increasing recognition of the need to go beyond gross domestic product (GDP) and other economic measures to develop a better understanding of how societies are performing. This recognition is reflected in the United Nations (UN) Sustainable

Development Goals (SDGs). The SDGs were adopted by member countries in 2015 and outline shared development goals and indicators across 17 different areas (Figure 2.12).

Figure 2.12. The Global Goals for Sustainable Development, 2015-30



Source: UN (n.d.^[50]), *About the Sustainable Development Goals*, www.un.org/sustainabledevelopment/sustainable-development-goals.

The SDGs include a commitment to “leave no one behind” which is particularly relevant given the poorer socio-economic outcomes generally experienced by Indigenous peoples across different countries. Indigenous peoples make up only 5% of the global population; however, it is estimated that they make up 15% of the world’s poor and about one-third of the world’s 900 million extremely poor rural people (UN Department of Economic and Social Affairs, 2019^[51]). The SDGs include six specific references to Indigenous peoples including SDG2 (agricultural output of Indigenous small-scale farmers) and SDG4 (equal access to education for Indigenous children). The UN Permanent Forum on Indigenous Issues has identified a number of ways to strengthen the Indigenous perspectives within the SDGs including developing indicators of land use, disaggregation of measures for Indigenous populations and strengthening the capacity of Indigenous peoples to participate in reporting on the implementation of the SDGs (UN, 2018^[52]). The subnational dimension is particularly important given the heterogeneous conditions facing Indigenous peoples across national territories.

Source: Elaboration based on UN Department of Economic and Social Affairs (2019^[51]), *United Nations - Indigenous Peoples*, <https://www.un.org/development/desa/indigenouspeoples/mandated-areas1/economic-and-social-development.html>; UN (2018^[52]), *The Permanent Forum and the 2030 Agenda*, <https://www.un.org/development/desa/indigenouspeoples/focus-areas/post-2015-agenda/the-sustainable-development-goals-sdgs-and-indigenous/recommendations.html> (accessed on 7 February 2019).

Well-being outcomes of Indigenous peoples at a sub-national level

This section of the chapter assesses Indigenous well-being outcomes at a sub-national level and the unit of analysis will be TL2 and TL3 regions. This place-based analytical approach is important for three reasons. The first is the connection of different First Nations in Australia to their country. Each of these First Nations are connected by shared identity as Aboriginal and Torres Strait Islanders but have different land rights, aspirations and capacities regarding development. Second, is that Indigenous peoples are distributed unevenly across the country. Although Indigenous Australians constitute 3.3% of the national total population, they constitute 27% of the Northern Territory’s population, and larger percentages at

smaller geographies (such as 42% in the Kimberley in Western Australia). Therefore, the relative importance of Indigenous populations to regional economies in terms of labour supply, consumption, and access to resource endowments, is different. Third, analysis shows that regional inequalities in OECD countries persist over time, and that regional level factors are significant in explaining these differences (Garcilazo and Oliveira Martins, 2013^[53]). Although a small number of large cities contribute disproportionately to national growth there are many smaller regions that together also make an important contribution. Indigenous peoples in Australia can play a key role in unlocking the growth potential of rural and regional economies.

Box 2.6. Note on methods

The objective of the analysis in this section is to assess levels and trends in well-being compared to the non-Indigenous population at a sub-national level. Indigenous well-being is assessed across six dimensions:

- Income (median household income).
- Jobs (employment rate, rate of unemployment, share of employment by industry, and occupation).
- Entrepreneurship (rate of self-employment).
- Education (share of 25 -64 year-olds with an upper secondary education).
- Health (life expectancy).
- Access to services (share of households with broadband).

The scope of the analysis is determined by data availability and is operationalised in four steps:

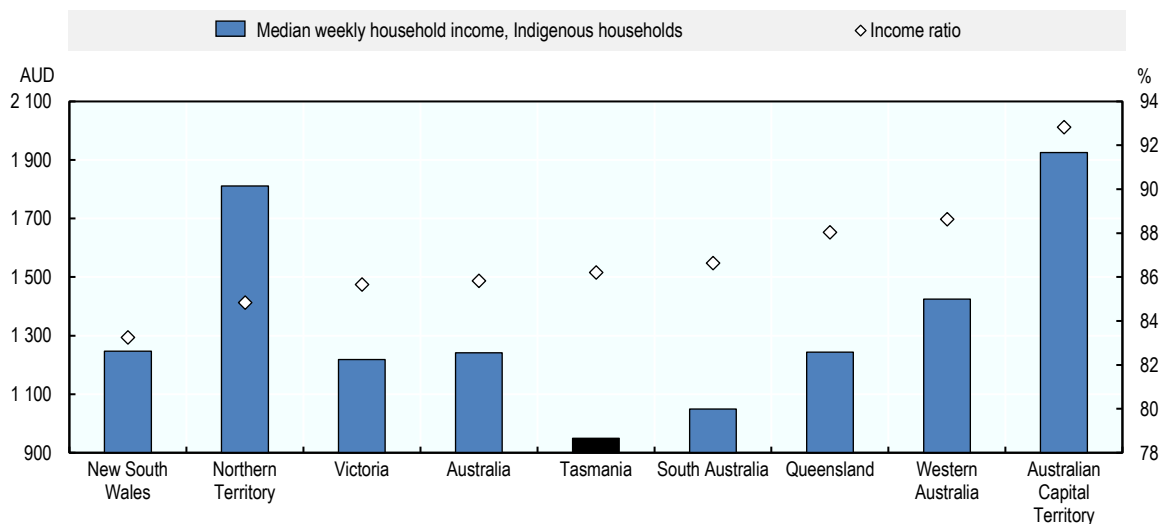
1. Assessing Indigenous and non-Indigenous outcomes at the TL2 level.
2. Assessing Indigenous and non-Indigenous outcomes at the TL3 level (urban, intermediate and rural regions), including the standard deviation of the sample to quantify the amount of variation.
3. Assessing the trends in well-being in the latest inter-census period (2011-2016).
4. Comparing Australia to other jurisdictions (where data is available).

Income

As seen in the previous section, there are significant income inequalities between Indigenous and non-Indigenous households (as well as individuals) at the national level. This is also the case a sub-national level with the level of household income of Indigenous and non-Indigenous people varies widely across states and territories (Figure 2.13). The highest median household weekly income of Indigenous households is in Australian Capital Territory (ACT) (AUD 1 925) while the lowest is in Tasmania (AUD 949), which is a gap of AUD 976. In terms of Indigenous and non-Indigenous median weekly household income the highest ratio is the ACT (93%) while the lowest is New South Wales (NSW) with 83%. NSW is also the state with the largest Indigenous population (216 000 or one-third of Australia's Indigenous population). The Northern Territory has the largest percentage share of Indigenous peoples (27%) with an income ratio of 85%.

Figure 2.13. Household weekly income of Indigenous households, 2016

Ratio of Indigenous median household income to non-Indigenous household income



Note: Indigenous households refer to occupied private dwellings where at least one person was Aboriginal and/or Torres Strait Islander.
Source: Calculations based on data received from the ABS.

Between 2011 and 2016, the median household weekly income of Indigenous households increased across all States and Territories. The difference between Indigenous and non-Indigenous median weekly household income was reduced by 5 percentage points. The difference in percentage change between Indigenous and non-Indigenous median household weekly income ranges from 9.1 percentage points in NSW to -9.3 percentage points in the Northern Territory. Therefore, the Northern Territory was the only jurisdiction in Australia where the income inequality between Indigenous and non-Indigenous peoples increased (by 5 percentage points of its 2011 level). The two largest increases in Indigenous household income is recorded in the Northern Territory (64.9 percentage points) and Western Australia (36.6 percentage points).

Table 2.4. Change in median household weekly income, comparing Indigenous and non-Indigenous households, Australian States and Territories, 2011-16

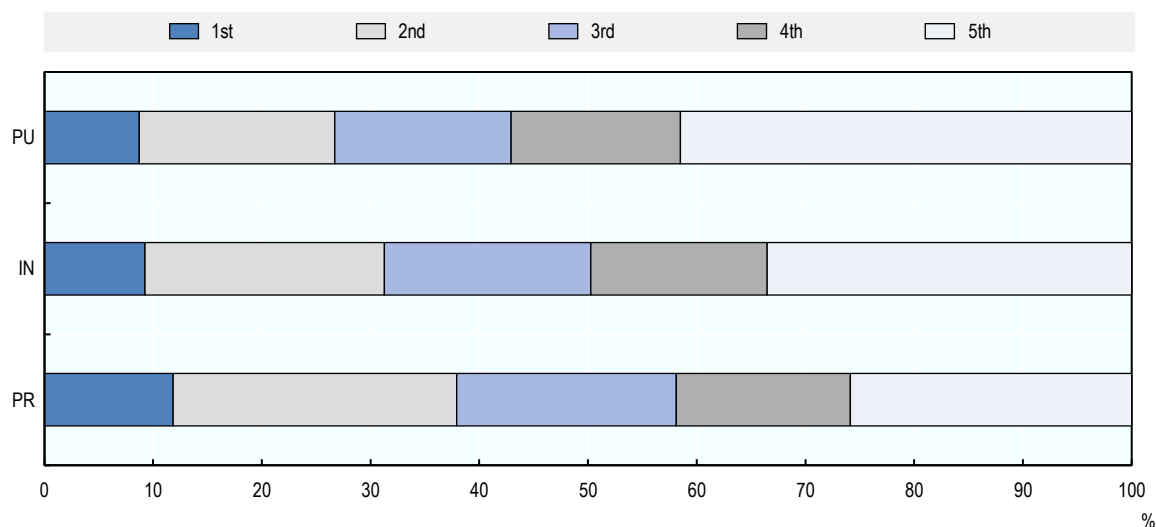
	Indigenous median weekly income (percentage points)	Non-Indigenous median weekly income (percentage points)	Difference in change (percentage points)
New South Wales	32.5	23.4	9.1
Northern Territory	64.9	74.3	-9.3
Victoria	26.6	18.5	8.1
Australia	25.2	20.2	5.0
Tasmania	2.8	2.0	0.8
South Australia	24.6	19.4	5.2
Queensland	16.6	15.5	1.1
Western Australia	36.6	32.9	3.7
Australian Capital Territory	15.5	10.0	5.6

Note: Percentage point change in median household weekly income between Indigenous and non-Indigenous households.
Source: Calculations based on data received from the ABS.

The age and composition of households is one contributor to growth in income and differences with the non-Indigenous population. The average household size in Australia is 2.6 people compared with the average Indigenous household of 3.2. The population is also younger and with a higher mortality less likely to be of retirement age. Households are more likely to be a family (80% compared to 71% for the non-Indigenous population), and less likely to be living alone (15% compared to 25% for the non-Indigenous population) (Australian Bureau of Statistics, 2018^[54]). The endogenous characteristics of regions also play a role. For example, the Northern Territory has a much higher rate of overcrowded households relative to other jurisdictions (53% compared to 20% in Western Australia and 17% in Queensland) (Australian Bureau of Statistics, 2018^[55]). This may partly explain higher levels of Indigenous household income and its growth in the recent period for this jurisdiction.

Figure 2.14 illustrates income distribution of Indigenous peoples by type of region. It demonstrates income inequalities among Indigenous peoples across predominantly urban, intermediate and predominantly rural regions. In 2016, Indigenous peoples living in predominantly rural regions had a higher likelihood to fall into a lower income groups than Indigenous peoples in other regions. Indeed, more than half of the Indigenous peoples in predominantly rural regions had income at the third quintile or lower. On the contrary, more than half of the Indigenous Australians in predominantly urban regions falls in the fourth and fifth income quintile. As discussed earlier, a higher proportion of Indigenous peoples live in predominantly rural regions than the non-Indigenous population. This spatial distribution is one of the reasons why Indigenous peoples are more likely to have a lower household income.

Figure 2.14. Weekly median household income distribution of Indigenous Australians by type of region, 2016



Note: Predominantly urban (PU); Intermediate (IN); Predominantly Rural (PR); 1st = 0-399 AUS\$; 2nd = 400-799 AUS\$; 3rd = 800-1249 AUS\$; 4th 1250-1749; 5th = 1750 or more

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

One of the main issues in regards to measuring income for Indigenous peoples is regarding subsistence hunting, fishing and harvesting. This is important to food security, the reproduction of culture, and it can be a major form of economic activity for Indigenous peoples in rural areas. Rural remote Indigenous communities can exist in a hybrid economy that mixes subsistence with wage labour and other forms of income including government transfers (Altman, 2004^[56]). Subsistence is not only about meeting basic nutritional needs, but also relates to bartering and trading within and between kinship groups, and has an

important cultural and relational component as well (Southcott and Natcher, 2018^[57]). It can also be understood as a form of imputed income, which does deliver welfare benefits that can potentially be monetised (Sangha et al., 2017^[58]). Indigenous groups also need to balance economic development with the use of land for subsistence activities and cultural values. This may also constrain certain economic activities that may otherwise be viable (e.g. energy, infrastructure and mining projects). To support decisions about natural resource management and economic development, good information and data are needed about the nature of subsistence economies (Box 2.7). The estimation of the economic value of wild resources that are harvested requires information about the quantity (weight) of each species harvested; number of people harvesting each species; market price of each type of wild resource; and costs of harvesting the wild resources (Gray and Altman, 2006^[59]).

Box 2.7. Alaska Department of Fish and Game, Division of Subsistence

Since the 1980s the Division of Subsistence within the Alaskan Department of Fish and Game has built an extensive evidence-based about subsistence economies in the state. The mission of the division is to scientifically gather, quantify, evaluate and report information about customary and traditional uses of Alaska's fish and wildlife resources. The division provides the following services:

- Compile and analyse existing data, and conduct research to gather data on the role of hunting and fishing by Alaskans for customary and traditional uses.
- Disseminate current subsistence use information to the public and government agencies.
- Evaluate the customary and traditional uses of fish and wildlife resources and provide advice to government agencies on limits to the use of these resources.
- Ensure resource management plans incorporate data about customary and traditional uses of fish and wildlife resources.

Research is conducted in partnership with local communities and governed by ethical research guidelines. When a new project is undertaken, division researchers use a range of scientific methods including systematic and comprehensive household surveys, key respondent interviews, resource mapping and participant observation. An online database has been created (the Community Subsistence Information System) that contains harvest information for over 260 Alaskan communities collected by the division from household surveys.

Source: Alaska Department of Fish and Game (2019^[60]), *Mission: Subsistence Division, Alaska Department of Fish and Game*, <http://www.adfg.alaska.gov/index.cfm?adfg=divisions.subsmission> (accessed on 25 January 2019).

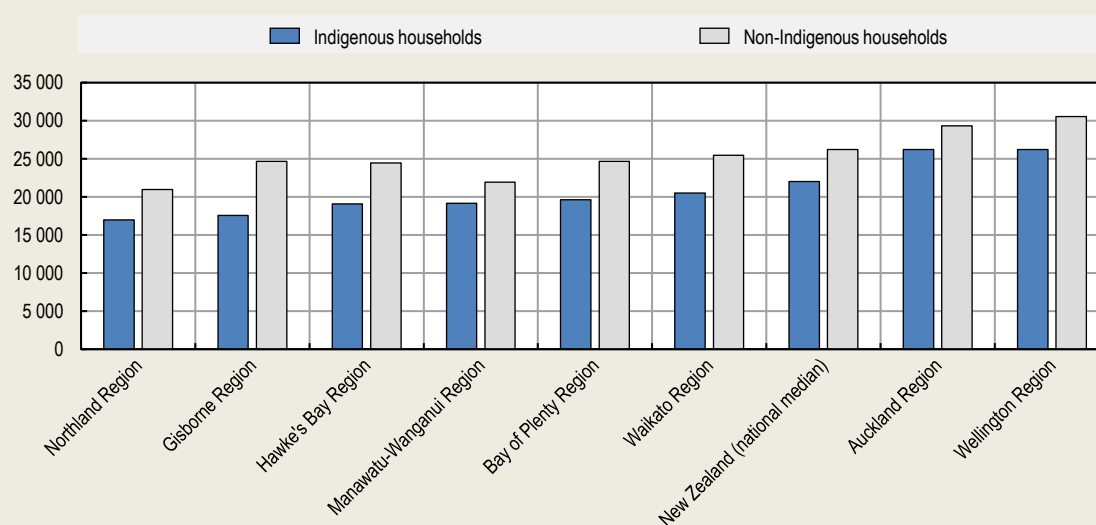
Box 2.8. Indigenous household income trends in New Zealand at a regional level

There are parallels between levels and trends in Indigenous household income in Australia and New Zealand. Although inter-regional inequalities are smaller, they are still evident in New Zealand. The median household income of Indigenous households varies from USD 16 982 to USD 26 220 in 2013 across regions (Figure 2.15). The highest median household income was in Wellington Region and the lowest in Northland Region. Auckland Region and Wellington Region were the only regions in 2013 that had a higher median household income of Indigenous households than the national median household income of Indigenous households. The rest of the selected TL2 regions had lower Indigenous household income than the national median.

Across different types of regions, the median Indigenous household income is higher predominantly urban regions than in intermediate or predominantly rural regions. The median rural Indigenous household income was about USD 9 200 lower than the median urban Indigenous household income. Furthermore, all intermediate regions have a lower median Indigenous household income than the national level. The region with the lowest median Indigenous household income, Northland, is a predominantly rural region. On the other hand, Auckland and Wellington, the two regions with the highest median Indigenous household income, are predominantly urban regions.

Figure 2.15. Median household income of Indigenous and non-Indigenous households across regions, 2013

USD at 2010 PPPs



Note: Household income is equivalised with the OECD-modified equivalisation scale so that household size is taken into account.
Source: Data provided by New Zealand on 21 December 2018.

While at a national and regional level, the median household income increased in 2006-13 in predominantly rural and intermediate regions, the income gap widened between Indigenous and non-Indigenous households, regardless of the higher median Indigenous household income in the regions. Wellington reported the highest increase in the median Indigenous household income in this period (an increase from USD 21 058 to USD 26 016). As expected, the lowest increase in the median Indigenous household income was in Northland, where the median income changes from USD 14 537 to USD 16 982. Due to increases in median income in Auckland and Wellington, the income gap between Indigenous and non-Indigenous households for New Zealand was reduced in the period 2006-13.

Source: OECD (2019^[45]), *Linking Indigenous Communities with Regional Development*, <https://dx.doi.org/10.1787/3203c082-en>.

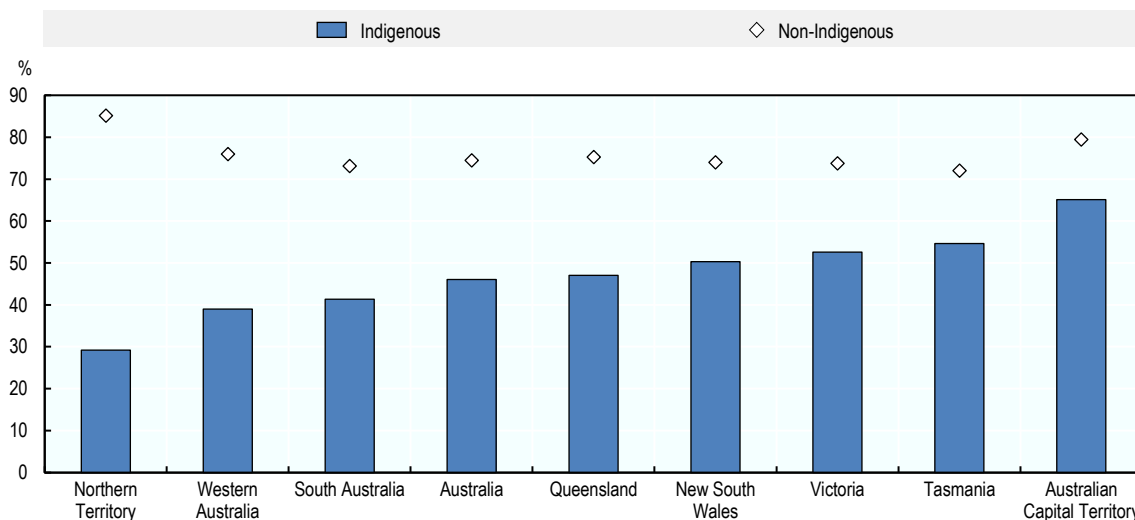
Jobs

Employment

Employment of Indigenous peoples vary between states and territories. According to the 2016 Census, the highest employment rate of Indigenous peoples was reported in Australian Capital Territory where more than 65% of the Indigenous peoples aged 15-64 was employed. Similarly, Victoria and Tasmania reported relatively high employment rates of Indigenous peoples. There more than half of the working age

population reported working. On the contrary, Queensland, South Australia, Western Australia and Northern Territory reported Indigenous employment rates below 50%. The lowest employment rate is reported in Northern Territory, where only 29% of the Indigenous working age peoples were working. The highest gap to the non-Indigenous employment rate is recorded in Northern Territory (56 percentage points) and the lowest gap in Australian Capital Territory (14 percentage points).

Figure 2.16. Employment rate by state and territory, 2016



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Between 2011 and 2016, in the majority of the states and territories, the gap to non-Indigenous people's employment rate increased. The largest increase was measured in Northern Territory, where the gap increased by 10 percentage points. New South Wales, Victoria and Australian Capital Territory were the only ones where the gap narrowed on average by 1.5 percentage points. Reasons for the lower employment rates than the non-Indigenous population include lower levels of education, training and skill levels (human capital), poorer health, living in areas with fewer labour market opportunities, higher levels of arrest and interactions with the criminal justice system, discrimination, and lower levels of job retention (Gray, Hunter and Lohar, 2012^[61]).

The spatial distribution of the population is also a contributing factor. Rural areas may have fewer employment opportunities, and/or be dominated by a small number of industries and therefore particularly susceptible to business cycle fluctuations and technological change and automation (Sheppard, 2013^[62]). Indigenous peoples may also have traditional obligations and livelihoods that limit participation in the formal economy. When looking at the variation of employment rate of Indigenous peoples across OECD TL3 regions in Australia, Indigenous peoples in predominantly rural regions are less likely to be employed than Indigenous peoples in other regions (see Table 2.5). In 2016, the average employment rate in predominantly rural regions was around 114 percentage points lower than the level at predominantly urban regions, which stood at 54%. Similarly, in 2016, the gap in employment rate between Indigenous and non-Indigenous peoples was the highest in predominantly rural regions (35 percentage points) and the lowest in predominantly urban regions (20 percentage points). The employment rates in intermediate regions falls in between urban and rural regions. In 2016, the employment rate of Indigenous peoples in intermediate regions was 49%.

Table 2.5. Employment rate, 2016

	Predominantly urban (%)	Intermediate (%)	Predominantly rural (%)
Indigenous population	54	49	40
Non-Indigenous population	74	76	56

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

In the period 2011- 2016 there were mixed outcomes in terms of changes in the gap between Indigenous and non-Indigenous peoples across different types of regions. The gap in employment rate between Indigenous and non-Indigenous peoples increased by 3 percentage points from 29 to 35 percentage points in predominantly rural regions while it decreased by one percentage point in predominantly urban regions.

In the international context, similar results can be observed in comparable jurisdictions (Table 2.6):

- Urban Indigenous peoples in Canada, New Zealand and the United States also have higher share of the working age population employed than the rural Indigenous peoples do (e.g. 58% for urban Indigenous Canadians compared to 45% for rural Indigenous Canadians).
- Similar to Australia, across Canada, New Zealand and the United States, gaps in the employment rate between Indigenous and non-Indigenous peoples are larger in rural areas than in urban areas. However, the gap is significantly larger in Australia (-35 percentage points) than Canada (-15 percentage points) and the United States (-17 percentage points).

Table 2.6. Employment rates by type of the region, 2016 or latest available year

	Predominantly urban			Intermediate			Predominantly rural		
	Indigenous (%)	Non-Indigenous (%)	Gap (PP)	Indigenous (%)	Non-Indigenous (%)	Gap (PP)	Indigenous (%)	Non-Indigenous (%)	Gap (PP)
AUS	54	74	-20	46	76	-30	40	75	-35
CAN	58	62	-4	52	61	-9	45	60	-15
NZL	60	71	-11	57	75	-18	52	72	-20
USA	59	68	-9	59	72	-13	53	70	-17

Note: The latest available year is 2013 for New Zealand; 2015 for Mexico; and 2016 for Australia, Canada and the United States. For Canada, the employment rate refers to Aboriginal and non-Aboriginal populations aged 15 and over. PP stands for percentage points.

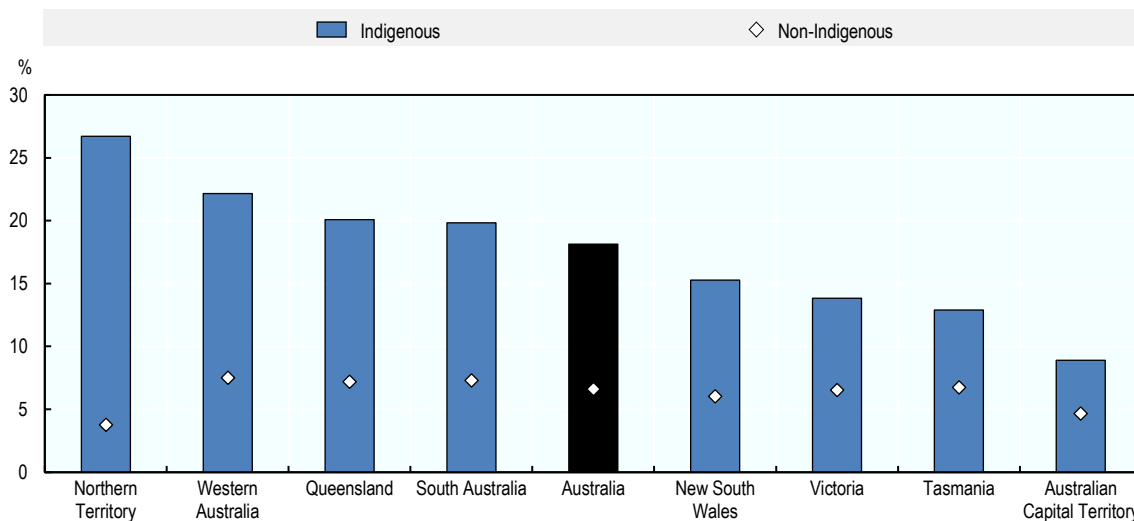
Source: Calculations based on data drawn from Australian Bureau of Statistics (ABS), Census of Population and Housing, 2016 (database), TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>; Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start>; Minnesota Population Center (2018^[31]), *Population and Housing Census*, Integrated Public Use Microdata Series, <https://international.ipums.org/international/>; Statistics New Zealand (n.d.^[32]), *2013 Census (database) for New Zealand*; U.S. Census Bureau (n.d.^[33]), *2012-2016 American Community Survey 5-Year Estimates*, Tables C23002A, C23002B, C23002C, C23002D using American FactFinder, <http://factfinder2.census.gov>, for the United States.

Unemployment

Unemployment at sub-national level varies from 9% (Australian Capital Territory) to 27% (Northern Territory). These results are similar to the employment rate. Furthermore, the unemployment rates of Indigenous peoples are above the national average in Queensland, South Australia, Western Australia and Northern Territory. Only in Victoria, Tasmania and Australian Capital Territory is the unemployment

rate of Indigenous peoples below 15%. Northern Territory is the jurisdiction with the largest unemployment gap between Indigenous and non-Indigenous peoples (23-percentage points difference) while the lowest gap is in Australian Capital Territory.

Figure 2.17. Unemployment by state and territory, 2016



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

As regards to the unemployment rate of Indigenous peoples across different types of regions, the analysis shows that inequalities arise between predominantly urban and predominantly rural regions. In predominantly rural regions, more than one-fifth of the working age population reported to be unemployed in 2016. On the contrary, the unemployment rate of Indigenous peoples in predominantly urban regions stood at 15%. The difference in unemployment rate of Indigenous peoples between urban and rural regions was 6 percentage points. In addition, the inequalities in unemployment between Indigenous and non-Indigenous peoples are the largest in rural areas. In 2016, the difference between the share of Indigenous and non-Indigenous peoples reported being unemployed was 15 percentage points. In urban areas, the difference was 8 percentage points.

Between 2011 and 2016, the unemployment rate of rural Indigenous population increased by 3.3 percentage points while the unemployment rate slightly decreased (0.06 percentage points) in predominantly urban regions. As a result, the gap in unemployment rate between Indigenous peoples in predominantly rural and predominantly urban regions increased by 3 percentage points in 2011-16. Similarly, the gap in unemployment rate between Indigenous and non-Indigenous peoples in predominantly rural regions increased by 2.4 percentage points from 13.1 percentage points to 15.5 percentage points.

Table 2.7. Unemployment rate by type of region, 2016

	Predominantly urban (%)	Intermediate (%)	Predominantly rural (%)
Indigenous	15	19	21
Non-Indigenous	7	7	6

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

At an international level, when considering countries similar to Australia, similar trends can be observed (Table 2.8):

- Indigenous unemployment rates in rural regions in 2016 in Canada was 18% and the United States it was 15%, which is lower than the level in Australia of 21%.
- Indigenous unemployment rates in urban regions in 2016 in Canada was 12%, 13% in the United States and 16% in New Zealand, which compares with the Australian level of 15%.
- The largest gaps between Indigenous and non-Indigenous unemployment rates can be observed in rural regions. The largest gap is in Australia (-15 percentage points) compared to Canada (-13 percentage points) and USA (-9 percentage points).

Table 2.8. Unemployment rate by TL3 region between Indigenous and non-Indigenous peoples

	Predominantly urban			Intermediate			Predominantly rural		
	Indigenous (%)	Non-Indigenous (%)	Gap (PP)	Indigenous (%)	Non-Indigenous (%)	Gap (PP)	Indigenous (%)	Non-Indigenous (%)	Gap (PP)
AUS	15	7	-8	19	7	-12	21	6	-15
CAN	12	7	-5	14	7	-7	21	8	-13
NZL	16	7	-9	17	5	-12	20	6	-14
USA	13	8	-5	13	7	-6	15	6	-9

Note: The latest available year is 2013 for New Zealand; 2015 for Mexico; and 2016 for Australia, Canada and the United States. For Canada, the unemployment rate refers to populations aged 15 and over.

Source: Calculations based on data drawn from Australian Bureau of Statistics (n.d.^[29]), *Census of Population and Housing, 2016 (database)*, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>; 2016 Census of Population, in Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start>; Minnesota Population Center (2018^[39]), *Population and Housing Census, Integrated Public Use Microdata Series*, <https://international.ipums.org/international/>; Statistics New Zealand (n.d.^[32]), *2013 Census (database) for New Zealand*; U.S. Census Bureau (n.d.^[33]), *2012-2016 American Community Survey 5-Year Estimates*, Tables C23002A, C23002B, C23002C, C23002D using American FactFinder, <http://factfinder2.census.gov>, for the United States.

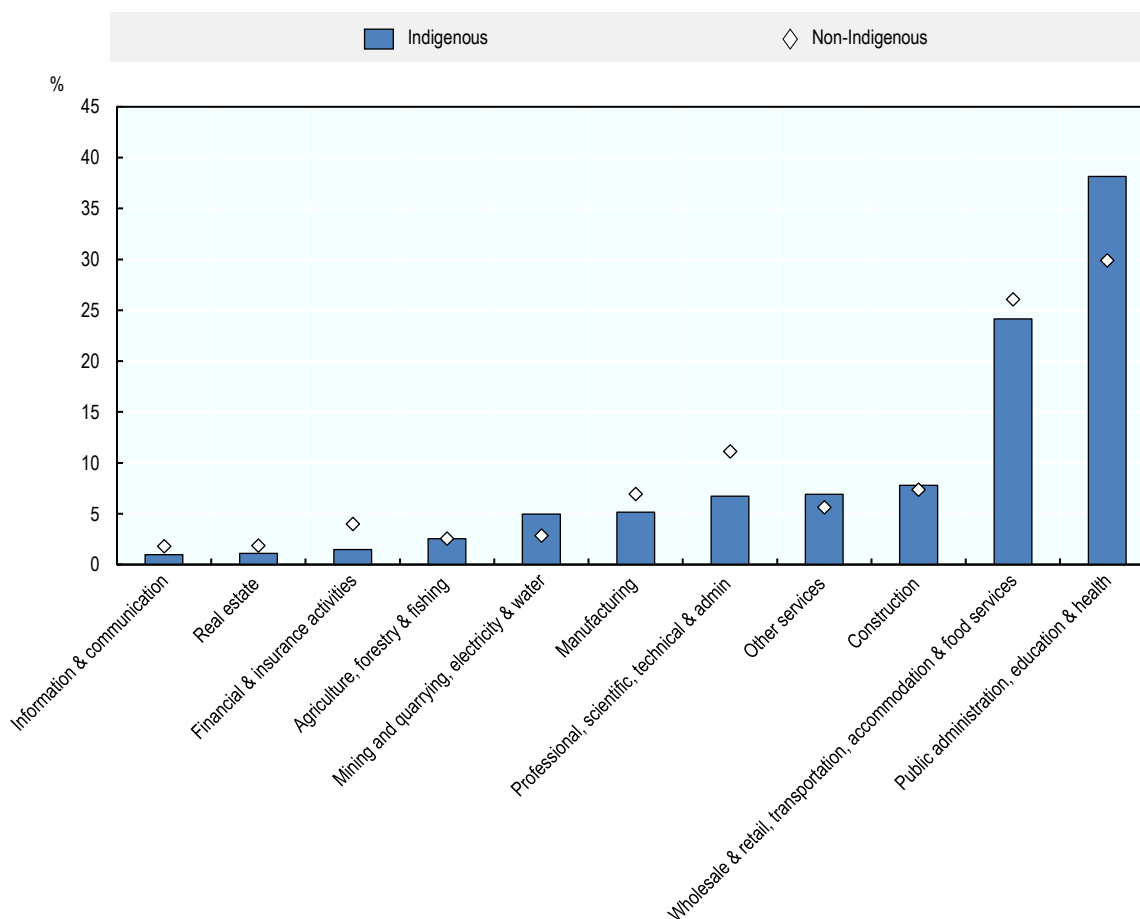
Employment by industry

At the national level, the top three industries where Indigenous peoples are employed are public administration and defence, education and human and health (38%), wholesale and retail trade, transportation, accommodation and food services (24%) and construction (8%) (Figure 2.18). Indigenous peoples are less likely to be employed in higher value tradeable business services such as professional, scientific and technical services (7% for Indigenous peoples compared to 11% for non-Indigenous

peoples), and financial and insurance services (1% for Indigenous peoples compared to 4% for non-Indigenous peoples). In terms of other tradeable sectors, a higher proportion of Indigenous peoples are employed in mining (5% for Indigenous peoples compared to 3% for non-Indigenous peoples), and lower proportion in manufacturing (5% for Indigenous peoples compared to 7% for non-Indigenous peoples).

Figure 2.18. Share of employment by industry, Indigenous and non-Indigenous, 2016

15 years and older



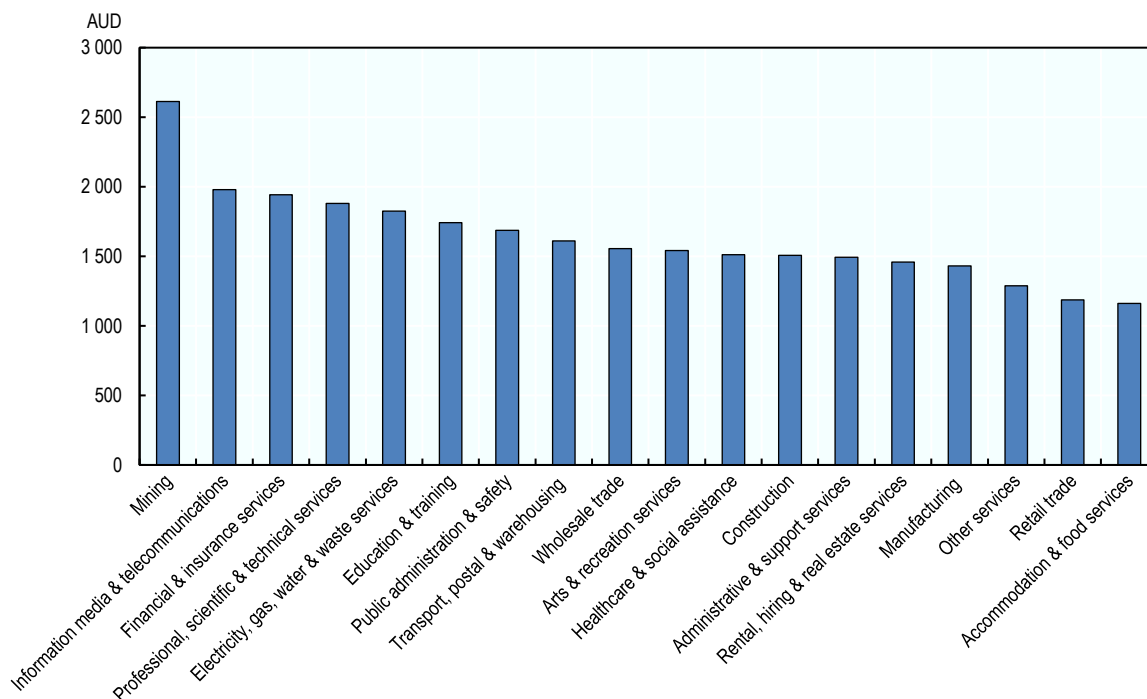
Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

These outcomes are partly explained by the geographic distribution of the Indigenous population. Higher value tradeable sectors tend to cluster in major metropolitan areas and a lower proportion of Indigenous peoples live in urban regions. Conversely, more Indigenous peoples are employed in mining, energy and water that are more likely to be located in rural regions. These employment shares have an impact on the overall levels of income and wages of Indigenous peoples. The mining sector only employs a low share of the overall workforce (5% of the Indigenous workforce). A significant proportion of the Indigenous workforce (70%) are employed in non-traded services that have lower average wages such as construction, health and social care, and education.

In predominantly rural regions, the top industries where Indigenous peoples are employed are health care and social assistance (17%), education (10%), public administrative and security (10%) and retail trade

(10%). The share of employment in public sector and health care and social assistance industry is particularly high compared to non-Indigenous population (at 17% versus 13% and at 10% versus 7%).

Figure 2.19. Average weekly earnings by sector, 2018



Source: Australian Bureau of Statistics (2019^[63]), 6302.0 - Average Weekly Earnings, Australia, Nov 2018, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6302.0Nov%202018?OpenDocument> (accessed on 8 July 2019).

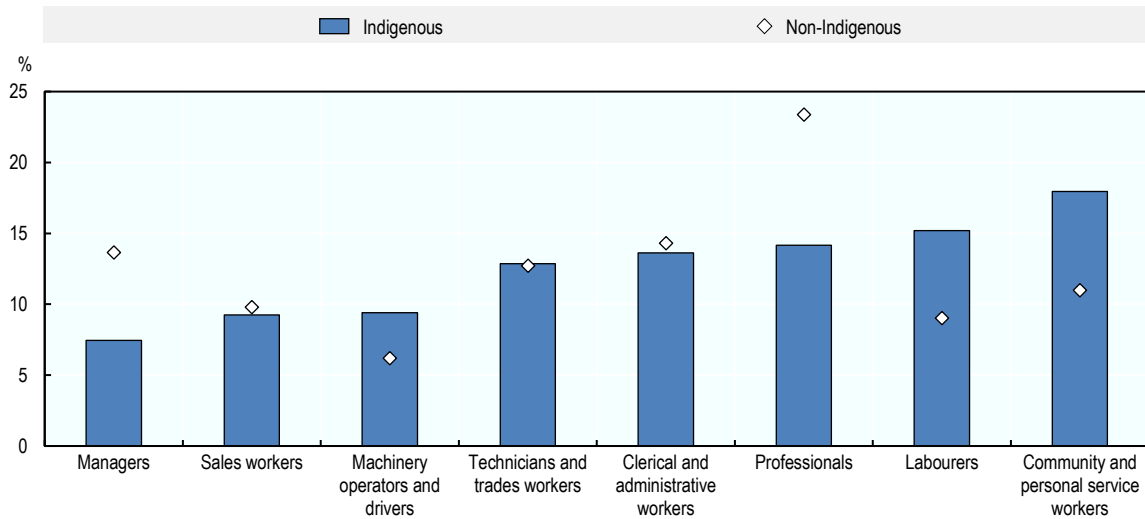
Occupations

In terms of occupations, the Indigenous population has the highest share of employment in community and personal service (18%) and labourers (15%). The share of employment in these occupational categories is higher than that of the non-Indigenous population (11% and 9% respectively). Indigenous peoples are underrepresented in higher skilled and wage professions such as management and professionals in comparison to the non-Indigenous workforce.

In predominantly rural regions, the Indigenous population has a high probability to be employed as Community and Personal service workers (19% or 8 percentage points higher than the non-Indigenous workforce), and labourers (19% or 6 percentage points higher than the non-Indigenous workforce) (Figures 2.21 and 2.22). In rural regions Indigenous peoples are less likely to be employed as professionals than the non-Indigenous workforce (-8 percentage points) and managers (-4 percentage points). In predominantly urban regions, Community and Personal Services is also important (16% of the Indigenous workforce); however, white collar employment as professionals (17%) and clerical and administrative workers (17%) are also important. This is a key difference in the Indigenous workforce between urban and rural regions. However, the gaps between the Indigenous and non-Indigenous workforce are relatively similar. In predominantly urban regions, Indigenous peoples are still less likely to be employed as professionals (-8 percentage points) and managers (-5 percentage points) compared to the non-Indigenous workforce.

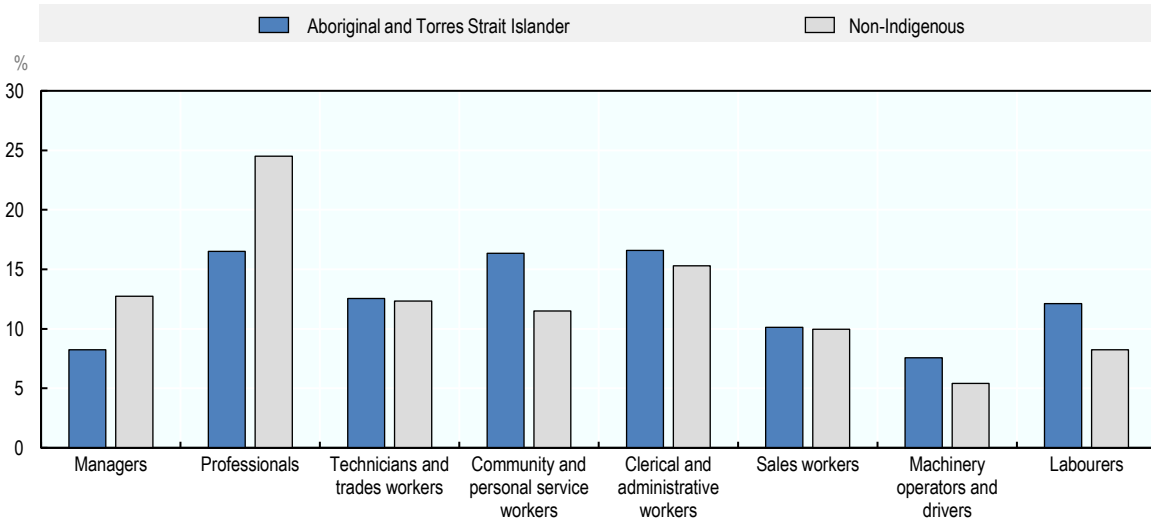
Figure 2.20. Share of Indigenous and non-Indigenous employment by occupation, 2016

15 years and older.



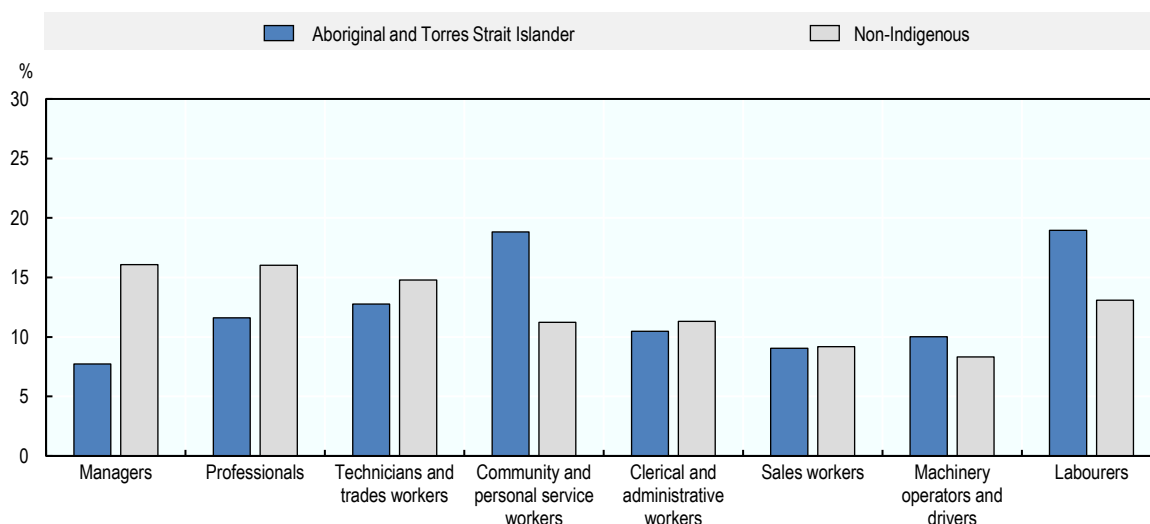
Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Figure 2.21. Share of workers by occupation, predominantly urban regions, Indigenous and non-Indigenous, 2016



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Figure 2.22. Share of workers by occupation, predominantly rural regions, Indigenous and non-Indigenous, 2016



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

One of the key issues for the future is the vulnerability of different types of jobs to automation and digitalisation (OECD, 2018_[64]). Jobs that perform non-routine tasks that are high skilled (professionals and managers) and low skilled (personal and community services) are growing and have lower risk from automation and digitalisation. Mid and lower skilled jobs where Indigenous peoples have a greater share of employment (machinery operators and drivers and labourers) have higher risk of automation. These risks are also elevated for regions with certain characteristics: lower education levels, a more rural economy, and a larger tradable sector (OECD, 2018_[64]). Rural economies have a lower share of service sector jobs that are less likely to be automated. Rural economies are also more likely to be dependent on a smaller number of industries and employers - this makes it more difficult to absorb displaced workers. This generates potential future risks for the Indigenous workforce because a higher proportion are in rural areas and they have lower skills than the non-Indigenous population.

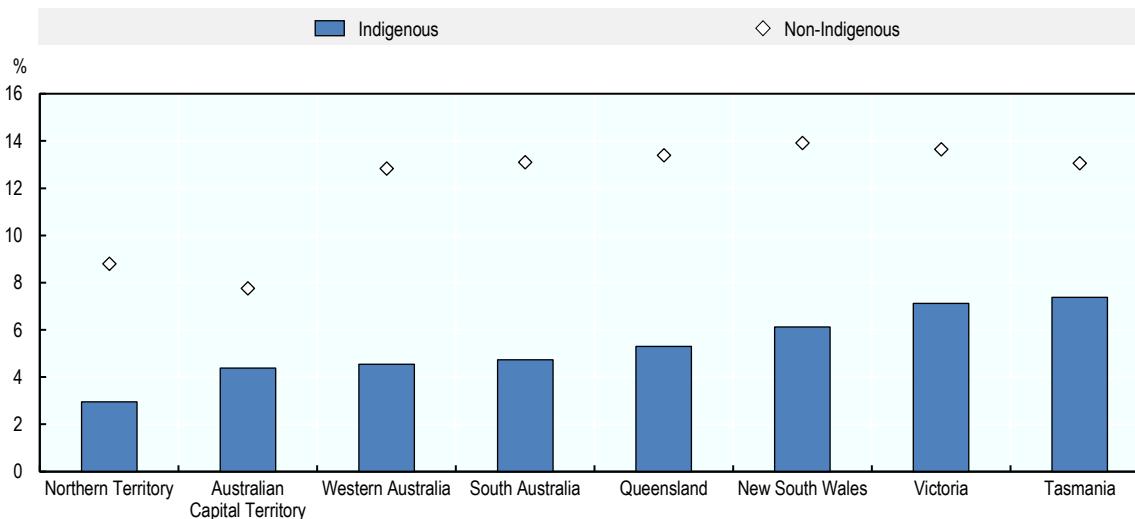
Self-employment

Self-employment is defined as the employment of employers, workers who work for themselves, members of producers' co-operatives, and unpaid family workers. Self-employment is an indicator of entrepreneurship but can also be an indicator of the 'push effect' of unemployment as people seek alternative forms of income (Swanepoel and Harrison, 2015_[65]). In 2016, there were 9 501 self-employed Indigenous peoples in Australia, which represents 5.5% of the total employed Indigenous labour force. Indigenous peoples are less likely to be self-employed than non-Indigenous peoples (5.5% compared to 13.4%). The share of self-employed Indigenous peoples increased between 2011 and 2016 from 5.2% to 5.5% while the share of self-employed non-Indigenous peoples reduced from 14% to 13.4%.

At the TL 2 level, Tasmania (7%) and Victoria (7%) have the highest self-employment rate for Indigenous peoples. The lowest levels are in the Northern Territory (3%) and the ACT (4%). Each jurisdiction has a gap between the Indigenous and non-Indigenous rate of self-employment, which ranges from -3 percentage points in the ACT to -8 percentage points in NSW, Queensland, South Australia and Western Australia (Table 2.9).

Figure 2.23. Share of self-employed population

Business owner managers



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Table 2.9. Percentage point difference in the Indigenous and non-Indigenous self-employment rate, Australian States and Territories, 2016

Jurisdiction	Percentage point difference (%)
Australian Capital Territory	-3
Tasmania	-6
Northern Territory	-6
Victoria	-7
New South Wales	-8
Queensland	-8
Western Australia	-8
South Australia	-8

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

The geographic distribution of the economically active Indigenous peoples contributes to these differences. Levels of self-employment at the regional level in Australia are influenced by the size and diversity of the local labour market (Swanepoel and Harrison, 2015_[65]). Self-employed Indigenous peoples represent a smaller share of employed labour force in predominantly rural regions than in predominantly urban regions (5.9% in comparison to 6.3%). As outlined earlier, there is a higher proportion of the Indigenous population in rural areas than the non-Indigenous population. Outback regions in South Australia, Northern Territory, Western Australia and Queensland have the lowest shares of self-employment among Indigenous peoples.

As with other economic indicators, the gap between the Indigenous and non-Indigenous self-employment rate is largest in predominantly rural regions (Table 2.10). The variation in the self-employment rates for Indigenous is greater in intermediate and predominantly rural regions than in urban regions. However, the distribution of self-employment rates of Indigenous peoples is less variable than non-Indigenous peoples.

For example, the variation of self-employment rates in predominantly rural regions was 0.021 for Indigenous peoples and 0.035 for non-Indigenous peoples. This may be due to Indigenous self-employment being a characteristic of a narrow range of industries (e.g. construction and tourism-related services).

Table 2.10. Self-employment rate by type of region

	Predominantly urban		Intermediate		Predominantly rural	
	Self-employment rate (%)	Standard deviation	Self-employment rate (%)	Standard deviation	Self-employment rate (%)	Standard deviation
Indigenous	6.3	.015	5.7	.023	5.9	.021
Non-Indigenous	12.4	.024	14.3	.039	16	.035

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

The rate self-employment can be compared at a national level with Canada and New Zealand (Table 2.11). The data from self-employment in Australia, Canada and New Zealand shows that there are gaps in the rate of self-employment between Indigenous and non-Indigenous populations. The largest gap is in New Zealand (-10 percentage points) followed by Australia (-9 percentage points), and Canada (-4 percentage points).

Table 2.11. Rate of self-employment, Indigenous and non-Indigenous, Australia, Canada and New Zealand

	Indigenous (%)	Non-Indigenous (%)	Gap (percentage points)
Australia	5	14	-9
Canada	9	13	-4
New Zealand	10	20	-10

Note: Following years are used: Canada (2016), Australia (2016), and New Zealand (2013).

Source: Australian Bureau of Statistics, 2016 for Australia; 2016 Census of Population, Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start>; and Ministry of Business, Innovation and Employment 2014 New Zealand for New Zealand.

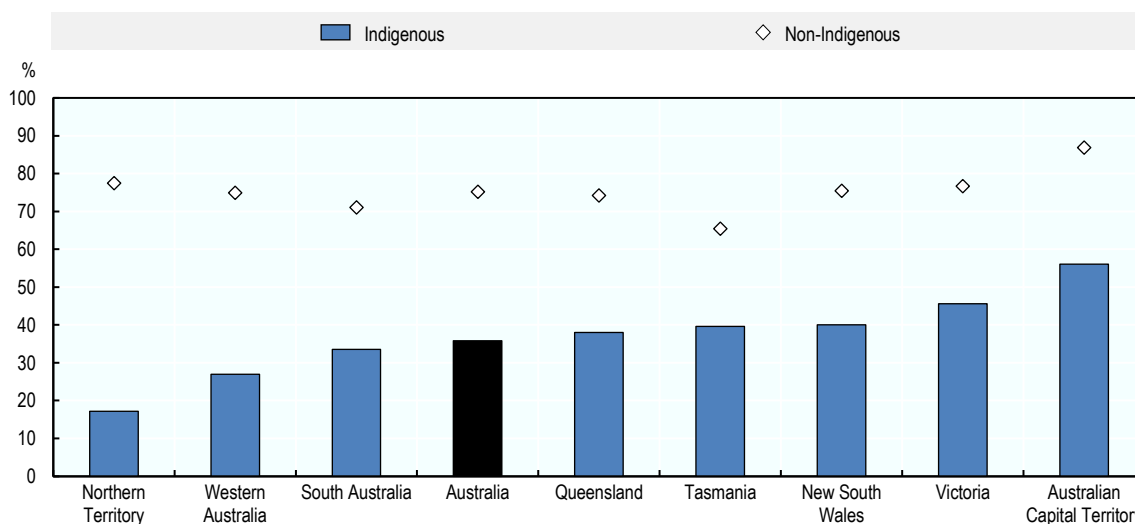
Education

Education has an important role to play in improving Indigenous well-being outcomes and supporting the development of Indigenous communities. Individuals with at least upper secondary degree are more likely to be economically active, have higher income and have better health than individuals with lower or no degree. There are significant gaps between the shares of Indigenous and non-Indigenous peoples aged 25-64 that have at least an upper secondary education across all Australian States and Territories. These outcomes represent a disadvantage for Indigenous populations in terms of accessing high income “knowledge economy” jobs in the future. Succeeding in the labour market requires foundational skills (literacy, numeracy) along with high-level communication, interpersonal and problem-solving skills.

In 2016, the highest share of Indigenous peoples with at least upper secondary education was reported in Australian Capital Territory, where the attainment rate was 56%. The educational attainment rate was below the national average in South Australia, Western Australia and Northern Territory. The region with the lowest educational rate of Indigenous peoples was reported in Northern Territory where only 17% of the Indigenous peoples aged 25-64 had at least upper secondary education. Compared to the non-

Indigenous peoples, large gaps in education occurs across Australian states and territories. The largest differences are reported in Northern Territory where the share of non-Indigenous peoples with at least upper secondary education is about 60 percentage points higher than the share of Indigenous peoples with this level of education. The state that reported the lowest inequalities in education is Tasmania where the share of non-Indigenous peoples is only one-fourth higher (26 percentage points).

Figure 2.24. Educational attainment rate, Indigenous and non-Indigenous peoples, by states and territories, 2016



Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

In predominantly rural regions, the share of Indigenous peoples with at least upper secondary education is only 34%. In urban areas, almost half of the Indigenous population (46%) obtains at least upper secondary education. The gap to non-Indigenous peoples is the largest in rural areas (37 percentage points) and lowest in urban and intermediate areas (34 percentage points). Variation in outcomes is also higher for Indigenous peoples indicating the diversity of results within predominantly urban, intermediate and rural regions.

Table 2.12. Educational attainment by type of region

	Predominantly urban		Intermediate		Predominantly rural	
	(%)	Standard deviation	(%)	Standard deviation	(%)	Standard deviation
Indigenous	46.3	.061	40.7	.058	33.6	.074
Non-Indigenous	77.0	.045	71.9	.030	64.9	.040

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Compared with other countries, Australia has lower educational outcomes for Indigenous peoples (Table 2.13). The share of the Indigenous population aged 25-64 with an upper secondary degree is only 36% compared to Canada (49%), New Zealand (60%), and the United States (79%). The gap between Indigenous and non-Indigenous is also larger in Australia relative to these jurisdictions. The gap in Australia

is marginally larger in predominantly rural (-37 percentage points) than urban regions (-34 percentage points), which is similar to the outcomes in Canada.

Table 2.13. Upper secondary school attainment, at the national level, Indigenous and non-Indigenous peoples (select countries)

The share of adult population (25-64) with at least upper secondary education, 2016 or the latest year available

	Indigenous (%)	Non-Indigenous (%)	Gap (percentage points)
Australia	36	75	-39
Canada	49	66	-16
New Zealand	60	69	-9
United States	79	88	-9

Note: The latest available year is 2013 for New Zealand; and 2016 for Australia, Canada and the United States. For Canada, educational attainment rate refers to populations aged 15 and over.

Source: Calculations based on data drawn from Australian Bureau of Statistics (ABS), Census of Population and Housing, 2016 (database), TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>; 2016 Census of Population, Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start>; Minnesota Population Center (2018^[39]), *Population and Housing Census*, Integrated Public Use Microdata Series, <https://international.ipums.org/international/>; Statistics New Zealand (n.d.^[32]), *2013 Census (database) for New Zealand*; U.S. Census Bureau (n.d.^[33]), *2012-2016 American Community Survey 5-Year Estimates*, Tables C15002A, C15002B, C15002C, C15002D using American FactFinder, <http://factfinder2.census.gov>, for the United States.

Table 2.14. Upper secondary school attainment, by TL3 region, Indigenous and non-Indigenous peoples

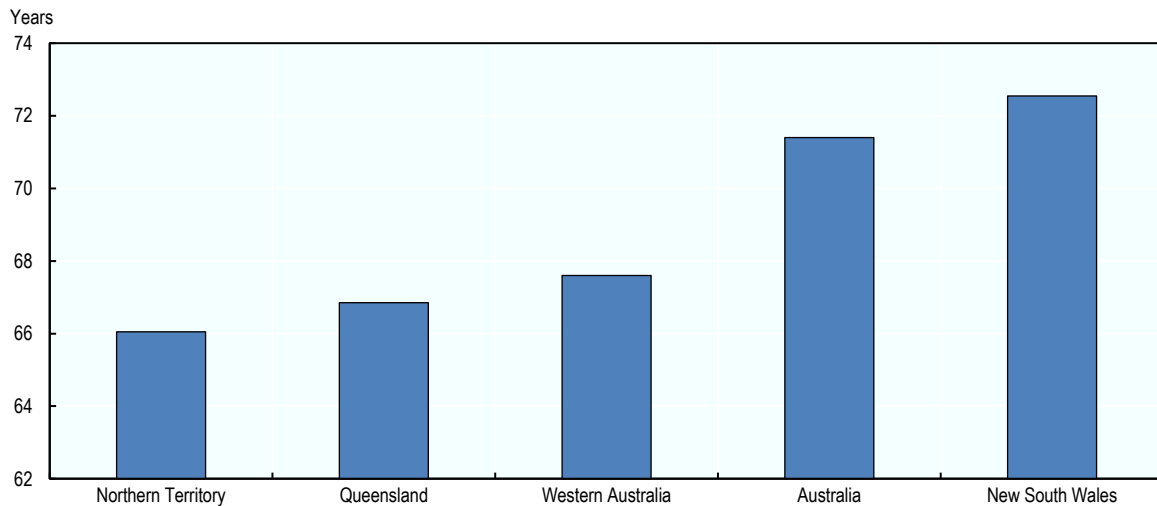
	Predominantly urban			Intermediate			Predominantly rural		
	Indigenous (%)	Non-Indigenous (%)	Gap (PP)	Indigenous (%)	Non-Indigenous (%)	Gap (PP)	Indigenous (%)	Non-Indigenous (%)	Gap (PP)
AUS	44	78	-34	38	72	-34	28	65	-37
CAN	53	68	-15	51	63	-12	40	58	-18
NZL	64	70	-13	54	67	-13	54	66	-12

Note: The latest available year is 2013 for New Zealand; and 2016 for Australia and Canada. For Canada, the educational attainment rate refers to populations aged 15 and over.

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016 (database), TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>; 2016 Census of Population, Statistics Canada (2016^[30]), *Census of Population for Canada*, <https://www.statcan.gc.ca/eng/start>; Minnesota Population Center (2018^[39]), *Population and Housing Census*, Integrated Public Use Microdata Series, <https://international.ipums.org/international/>; Statistics New Zealand (n.d.^[32]), *2013 Census (database) for New Zealand*.

Health

Health is a crucial element of well-being for people of all backgrounds. Having a good health enables individuals to participate in the activities that they value, and to pursue the lives that they want to live. Therefore, it affects people's ability to take part in the formal and informal economy, acquire new skills and to live good quality lives. The life expectancy of Indigenous peoples varies by 6 years in the four regions with the largest Indigenous population. The state with the highest life expectancy was in 2010-12 New South Wales (72.3 years) and the lowest was reported in Northern Territory (66 years).

Figure 2.25. Life expectancy at birth Indigenous peoples, 2010-12

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Data based on the ABS classification of urban and rural regions, Indigenous peoples in outer regional, remote and very remote regions has lower life expectancy than Indigenous peoples living in major cities and inner regional regions, on average 0.8 years lower. The corresponding urban rural difference in non-Indigenous peoples' life expectancy is one year.

Access to services

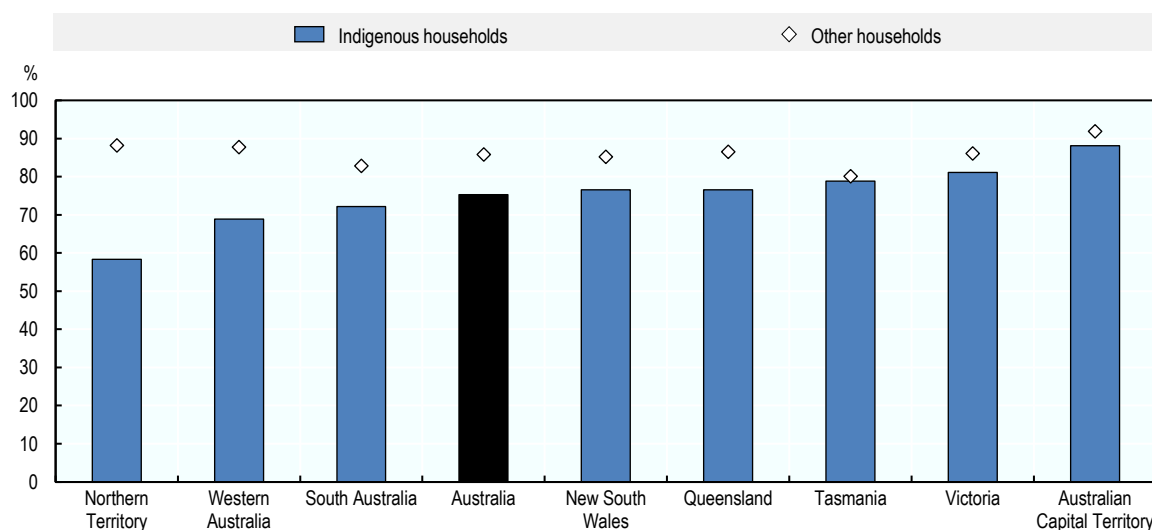
Access to services is a key issue in sparsely populated areas (OECD, 2017^[66]). This is an important issue for Indigenous peoples as a higher proportion live in predominantly rural regions than the non-Indigenous. One way of measuring accessibility is accessibility to services, measured by the percent of households with connection to the internet. Digital access has become an important tool for community development and therefore it can be seen as an enabler for generating economic growth and job opportunities, as well as increasing quality of life (Federal Reserve Bank of Dallas, 2016^[67]). Lower levels of digital access undermine policy objectives related to economic participation, health and education (OECD, 2018^[68]).

In 2016, 75% of the Indigenous households reported having access to the internet and this was 10.8 percentage points lower than the rate for non-Indigenous households. At the sub-national level, the share of Indigenous household with an access to the internet varies from 58% (Northern Territory) to 88% (Australian Capital Territory). For South Australia, Western Australia and Northern Territory, the share of Indigenous households with access to the internet is above the national average of 75%. The largest gap is found in Northern Territory, where the difference is approximately 30 percentage points.

There are significant differences in accessibility between predominantly urban and rural regions. In 2016, about 68% of Indigenous rural households had access to the internet while in predominantly urban regions 83% of Indigenous households had access. The dispersal of values is also much higher for Indigenous peoples in intermediate and predominantly rural regions. The most remote regions such as the Outback regions of Australia (Northern Territory – Outback, South Australia – Outback and Western Australia – Outback) have the lowest share of Indigenous households with Internet access. For instance, in Northern Territory – Outback region, the share of Indigenous households with Internet access is at 49% while the share was at 80% in Hunter Valley (excluding Newcastle), another predominantly rural region according to OECD typology. In predominantly urban regions, the share varies by ten percentage points. Similarly,

the gap in access to Internet between Indigenous and non-Indigenous households was the largest in remote Outback regions.

Figure 2.26. Share of households with access to internet, by state and territories, 2016



Note: Indigenous households refer to occupied private dwellings where at least one person was Aboriginal and/or Torres Strait Islander.

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Table 2.15. Household with access to Internet

	Predominantly urban		Intermediate		Predominantly rural	
	(%)	Standard deviation	(%)	Standard deviation	(%)	Standard deviation
Indigenous	83	0.034	75	0.060	68	0.081
Non-Indigenous	88	0.030	84	0.025	79	0.028

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Findings from the National Aboriginal and Torres Strait Islander Social Survey

As discussed earlier, Indigenous peoples have values and perspectives about well-being that are different to the non-Indigenous population. The ABS has addressed this need by developing the Indigenous Survey Strategy, which was constructed, based on consultation with Indigenous peoples, two decades ago. The Indigenous Survey Strategy includes domains such as health, housing, education, employment and social and cultural well-being. The main product of this strategy has been the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and it was conducted in conjunction with the General Social Survey (GSS) of all Australians (Australian Bureau of Statistics, 2016_[69]). Between 2012 and 2014, ABS conducted the third NATSISS survey and the main results are outlined in Box 2.9. These findings emphasise the importance of cultural identity and kinship relations to Indigenous well-being.

Box 2.9. Indigenous non-material well-being – evidence from National Aboriginal and Torres Strait Islander Social Survey

- **Indigenous peoples living in remote areas have a stronger cultural identity.** 54.9% of the Indigenous peoples in remote areas speaks an Indigenous language whereas only small fraction of Indigenous peoples (8%) speaks Indigenous language in non-remote areas. However, English is the most common first language among Indigenous peoples across Australia as 59.1% of Indigenous peoples in remote areas spoke English or other language as their first language while English or other language is about 98% of non-remote Indigenous peoples first language.
- **A bit more than one-fifth of Indigenous Australians live in their homeland.** While the national average of Indigenous Australians living in their homeland is around 23%, significantly higher proportion of this are Indigenous peoples in remote areas. About 22% of Indigenous peoples from remote-areas identified living in their homeland, which is higher than in non-remote areas (16.6%).
- **Community support is an important especially in remote areas.** Indigenous peoples in remote areas are more likely to provide support to their relatives living outside of the household than Indigenous peoples in non-remote areas. In 2012-2014, 59.9% of Indigenous peoples in remote-areas reported that they take care of their relatives outside of their households.
- **Indigenous peoples in remote areas have much more face-to-face contacts with their family and friends than their counterparts in non-remote areas.** More than half of the Indigenous peoples in remote areas had every day face-to-face contact with family or friends outside the household whereas the share was 36.5% in non-remote areas.
- **Trust in other people divides Indigenous Australians.** 38.5% of Indigenous peoples in remote areas strongly agreed that other peoples can be trusted, however, the share of Indigenous peoples who strongly disagreed was 45.7%. Similar trend is observed in non-remote areas, where Indigenous peoples who felt that people could be trusted was 31.8% and about 40% disagreed.
- **Majority of Indigenous peoples perceive that living conditions in their community either have not changed or the community is a better place to live.** 30.7% thinks that their community is a better place to live whereas only 16.4% of Indigenous peoples thought that their community is a worse place to live than 12 months ago.
- **Indigenous peoples living in remote areas face difficulties accessing to services.** Especially Indigenous peoples living in very remote areas reported difficulties accessing services such as family assistance office (14.2%), dental care (17.2%), financial institutions (13.4%) and housing services (10%). The most common reason for accessibility was that there are no services in the area (20.7%) or they are inadequate services (17%). Moreover, less than half of the Indigenous peoples (46.9%) in very remote areas did not access internet in last 12 months.

Source: Australian Bureau of Statistics (2016^[70]) National Aboriginal and Torres Strait Islander Social Survey (NATSISS), cat. No. 4714.0, viewed January 2019,
<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0-2014-15-Main%20Features-Key%20findings-1AustralianBureauofStatistics>.

Current stage of well-being of Australia's Indigenous peoples at a regional level

Moving beyond national averages and focussing on the sub-national level helps to better understand the nature of Indigenous well-being and inequalities. This is an incomplete picture because issues which matter to Indigenous peoples (cultural identity, discrimination, and kinship relations) are not available in a sufficiently disaggregated form. Other indicators related to access to land and waters and the role of subsistence economies are not available at a sub-national level. The indicators that are available are those which apply to the population as a whole, and this enables analysis of inequalities between Indigenous and non-Indigenous populations.

The range of inequalities at a State and Territory (TL2) level across multiple indicators are significant. For example, the rate of Indigenous unemployment in the ACT is 9% whereas in the Northern Territory it is 27%. In the case of the employment rate, it ranges from 65% in the ACT to 29% in the Northern Territory. These outcomes are influenced by the socio-economic status, industry mix, and the geography of each jurisdiction. Examining the gaps between the Indigenous and non-Indigenous population is a way of better accounting for these place-based characteristics. The analysis in this section showed these gaps were large and they vary by jurisdiction. The largest gaps are evident in the States and Territories, which are resource based and have relatively lower population densities (Queensland, the Northern Territory and Western Australia) (Table 2.16).

Table 2.16. Gaps in key economic indicators, Indigenous and non-Indigenous population, by State and Territory, 2016

	Median weekly household income	Employment rate	Unemployment rate
New South Wales	-17	-24	9
Northern Territory	-15	-57	23
Victoria	-14	-21	7
Australia	-14	-28	12
Tasmania	-14	-17	6
South Australia	-13	-32	13
Queensland	-12	-28	13
Western Australia	-11	-37	15
Australian Capital Territory	-7	-15	4

Note: Percentage point difference between Indigenous and non-Indigenous outcomes.

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Indigenous peoples in predominantly urban regions have on average higher performance in well-being than Indigenous peoples in intermediate and rural regions. Indigenous peoples in predominantly rural regions have the most disadvantage position based on the five indicators considered in the analysis. For example, the unemployment rate of Indigenous peoples in rural regions is 6 percentage points higher than in urban regions, and the difference in terms of upper secondary school education attainment for 25-64 years olds between urban and rural Indigenous peoples is -16 percentage points. Gaps between Indigenous and non-Indigenous peoples tend to be higher in rural regions (Table 2.17). Indigenous peoples in rural areas tend to be less economically active, have poorer access to services, are engaged in lower skilled occupations, and are more vulnerable to technological and structural economic change.

Table 2.17. Gaps in well-being indicators, Indigenous and non-Indigenous population, by type of region, 2016

	Urban	Intermediate	Rural
Employment rate gap	-20	-27	-32
Unemployment rate gap	8	12	15
Self-employment rate	-6	-9	-10
Educational attainment	-31	-31	-31
Household Internet access	-5	-9	-11

Note: Percentage point difference between Indigenous and non-Indigenous outcomes.

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia in Australian Bureau of Statistics (n.d.^[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Australia also confronts similar challenges to other comparable jurisdictions (Canada, New Zealand, and the United States) but the challenges are greater. For example, the gap in educational attainment between Indigenous and non-Indigenous peoples in predominantly rural areas is -37 percentage points in Australia compared with -18 percentage points in Canada. In terms of the employment rate, the gap is -35 percentage points in Australia compared to -15 percentage points in Canada, and -17 percentage points in the United States. These findings emphasise the importance of different jurisdictions sharing lessons, policies and good practices about how to improve Indigenous well-being, particularly in rural and regional areas.

However, this analysis cannot be just reduced to a simple urban and rural divide, and a place-based nuance is required. There are higher variations in well-being outcomes within urban, intermediate and rural regions for Indigenous peoples than the non-Indigenous population. This indicates that endogenous place-based characteristics play an important role in shaping the well-being outcomes of Indigenous peoples.

Factor analysis

The analysis in the previous section demonstrated inequalities in key economic and educational outcomes between Indigenous and non-Indigenous peoples across different regions within Australia, particularly in the case of rural areas. Regional differences in development outcomes evidenced in wider OECD work are the result of a combination of interconnected factors such as demographics, access to markets and services, physical and human capital, infrastructure and the regions capacity to innovate (OECD, 2009^[71]; 2012^[72]).

This section examines factors associated with different levels of labour force participation for Indigenous peoples across different types of regions. This indicator was chosen as it reflects the economically active population within a region. The factors examined in this analysis are: median travel time to the closest city, the employment rate, share of Indigenous households with an access to broadband, the unemployment rate, and the proportion of the population aged 25-64 with a post-secondary education. There are multiple factors that might influence Indigenous labour force participation. However, the analysis is limited by data availability and the exclusion of relevant factors such as community leadership, sectoral specialisation, infrastructure, the quality of institutions, and innovative capacity.

Overall, Indigenous peoples in predominantly urban regions have a greater likelihood to be in the labour force than Indigenous peoples in intermediate and rural regions as well as the average Indigenous person (see Table 2.18). The gaps in the labour force participation rate between Indigenous and non-Indigenous peoples is much higher in rural (-30 percentage points) and intermediate regions (-23 percentage points), than in urban regions (-16 per percentage points). This demonstrates the relative benefits of being located in thick labour markets with diverse job opportunities. The variation of outcomes (measured by the standard

deviation) is relatively higher for Indigenous peoples across all regions, which again indicates the importance of policies that are tailored to the nuances of different places.

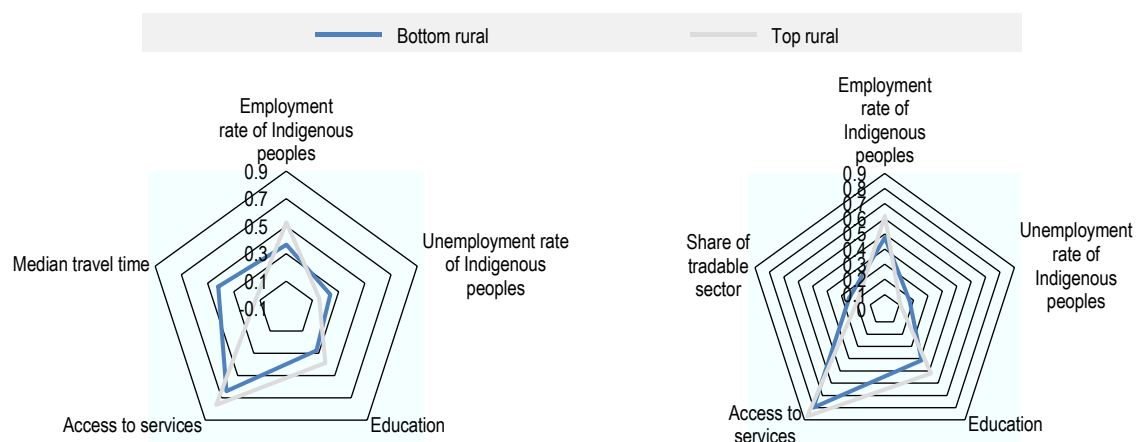
Table 2.18. Labour force participation by type of regions, 2016

	Predominantly urban		Intermediate		Predominantly rural	
	(%)	Standard deviation	(%)	Standard deviation	(%)	Standard deviation
Indigenous	63	0.07	58	0.07	50	0.08
Non-Indigenous	79	0.02	81	0.03	80	0.05

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

Figure 2.27 compares factors associated with the top 20% of labour force participation rates of Indigenous peoples and the bottom 20% of labour force rates of Indigenous peoples in 2016 across urban and rural regions. In predominantly rural regions, the top performers have a higher employment rate, educational attainment rate, household internet access, and are closer to cities. Rural regions which face the greatest challenges are those which are remote and have weak job markets, poor access to services, and lower rates of educational achievement. In urban regions, the top performers also have healthier labour markets, higher education levels, and better access to services.

Figure 2.27. Labour force participation rate - top and bottom performers, urban-rural regions



Note: All indicators represent shares; the scale goes from 0 to 1. Median travel time is been standardised using minimum and maximum methodology. Top refers to urban regions in the top 20% of labour force participation rates of Indigenous peoples and the bottom refers to urban regions in the 20% of labour force rates of Indigenous peoples in 2016.

Source: Calculations based on data drawn from ABS Census of Population and Housing, 2016, TableBuilder for Australia, in Australian Bureau of Statistics (n.d._[29]), *Census TableBuilder*, <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/About+TableBuilder>.

This analysis reinforces the point about some of the structural challenges faced by Indigenous peoples in rural remote areas. Low-density economies are generally characterised by: small populations and labour forces, weak connectivity to external markets, local markets that offer a limited set of goods and services, a high dependence on primary sectors and first stage processing, a workforce dominated by lower skill workers, higher unit costs to deliver public services, dispersed settlements that lead to fractured local government systems and disconnected local labour markets, and a small local tax base (OECD, 2017_[66]).

By contrast, urban regions enjoy agglomeration benefits, which arise due to sharing facilities, inputs and gains from specialisation; thicker labour markets that result in better matching and lower search costs; and knowledge spillovers between firms (Rosenthal and Strange, 2004^[73]; Puga, 2010^[74]; Duranton and Puga, 2004^[75]).

A policy agenda for Indigenous Australians needs to include a focus on how to improve well-being across different types of regions. This includes how Indigenous peoples in low-density economies can overcome the disadvantages that result from a lack of economic concentration. For instance, how to leverage areas of absolute advantage (resource endowments and amenities) and ensuring there is a business eco-system (premises, networks and mentors, technical advice and capital) that can support entrepreneurs and small business. Investments in broadband and high-speed Internet connections in remote areas can enhance connectivity, offer opportunities for new ways to deliver services and enhance the spread of new ideas. These issues will be discussed further in Chapters 2 and 3.

Improving Indigenous statistics and data governance

The objective of this section of the chapter is to assess whether current practices related to Indigenous statistics and data governance support a place-based approach to economic development. The assessment framework draws from the *OECD Linking Indigenous Communities to Regional Development* global report (OECD, 2019^[45]). The first section begins by discussing lessons, leading practices and challenges related to Indigenous statistical frameworks. This includes how a definition of Indigenous peoples is operationalised in the statistical framework, the incorporation of Indigenous geographies into the territorial classification, and specific survey instruments that can provide tailored statistical outputs for Indigenous peoples. The second section addresses issues related to the governance of data. This includes how Indigenous peoples are included in the governance of national statistical agencies, linking data to increase availability, and supporting Indigenous data sovereignty.

Indigenous statistical frameworks

This sub-section of the chapter discusses lessons, leading practices and challenges related to the following points:

- Developing an agreed national definition that is consistent with the principles of the International Labour Organization (ILO) Indigenous and Tribal Peoples Convention 169 (self-identification, descent and belonging to a group).
- Applying the agreed national definition consistently across different government agencies, and between levels of government.
- Including Indigenous territories in the standard geographic classification for the collection and reporting of statistics.
- Providing regular reporting of Indigenous well-being outcomes (economic, social and environmental dimensions) at national and sub-national levels (disaggregated by urban, rural and remote regions), and by gender and age dimensions (that are internationally comparable and in line with the SDGs).
- Implementing specific population-based surveys on issues that are important to Indigenous peoples and can address gaps in the statistical framework (e.g. subsistence, health, business, and leadership and governance).

Defining and collecting statistics about Indigenous peoples

Historically, governments defined who was Indigenous by applying criteria about ancestry, which was used to exclude Indigenous Australians, and justify policies such as the removal of children from families (Dodson, 1994^[76]). In 1978, the Australian Government adopted the following definition of Indigenous Australians: “*An Aboriginal or Torres Strait Islander is a person of Aboriginal and Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives*”. This definition is consistent with international norms embedded in the International Labour Organisation’s Indigenous and Tribal Peoples Convention 169 (1989), and the United Nations Declaration of the Rights of Indigenous Peoples (2007) that define Indigenous peoples on the basis of self-identification, descent, and belonging to a group. This is a formal government definition for the purposes of collecting statistics and accessibility to government programs and support. Many Indigenous people prefer to be referred to by a local or regional name specific to an Indigenous ethno-linguistic group, or by the collective terms ‘First Nations’ or ‘First Peoples’ and reserve the right to determine who is “Indigenous” (Dodson, 1994^[76]; Jordan, Markham and Altman, 2019^[22]).

The Australian Bureau of Statistics (ABS) adopted a Standard Indigenous Question (SIQ) in 1996. The SIQ is based on self-identification and origin: “*Are you of Aboriginal or Torres Strait Islander origin?*” The method is based upon respondents self-identifying (there is no requirement for proof of their Indigenous status). The SIQ does not enable the collection of information related to belonging i.e. “*accepted as such by the community in which he or she lives*”. It is noted by the Australian Government that it is usually not practical to collect information on community acceptance in a survey or administrative data collection setting (Department of the Prime Minister and Cabinet, 2018^[24]). The Registration of Indigenous to specific institutions - e.g. Tribes in the United States, First Nations in Canada, or *Sameby* in Sweden – is not a contemporary practice in Australia.

The SIQ provides the basis for the ABS and other agencies to collect consistent Aboriginal and Torres Strait Islander statistics and is used in the five yearly Census, and in all ABS collections that ask respondents for their Aboriginal and Torres Strait Islander status. The SIQ is also used in the health, education, crime and justice sectors in most Australian state and territory government departments and agencies, and in many non-government sector collections. These improvements have been supported by the National Indigenous Reform Agreement developed under the framework of the Council of Australian Governments (Council of Australian Governments, 2012^[77]). It committed with the ABS and the Australian Institute of Health Welfare (AIHW) to work with States and Territories to adopt the standard Indigenous status question and recording categories on data collection and information systems for key data sets (Department of the Prime Minister and Cabinet, 2018^[24]).

Indigenous peoples and the territorial classification

Statistics about Indigenous peoples collected by the ABS can be organised into the standard territorial classification of Australia (the Australian Standard Geography Standard or ASGS). In relation to the OECD classification this is at the State and Territory level (TL2), and the Statistical Area (SA) Level 4 (TL3) (Australian Bureau of Statistics, 2016^[78]). The latter corresponds to a local labour market adjusted to population sizes that enable an appropriate sample size for the labour force survey (minimum of 100,000 people). There are 4 territorial levels below the SA 4. SA 3 corresponds to a smaller functional area (e.g. a regional city) while the SA 2 correspond to a suburb or locality and have an average population of 10,000. SA 1 is an area within a locality that has an average population of 400, and below this are mesh blocks that contain 30 to 60 dwellings.

Statistics can also be organised into a specific Indigenous Structure within the ASGS, which is used to release data from the Census of Population and Housing (Australian Bureau of Statistics, 2016^[79]). The structure comprises three territorial levels, which are all aggregated from the SA 1. The first level is Indigenous Locations (ILOCs) that represent a spatial community of Indigenous peoples with a minimum

resident population of 90 (this may be a single SA 1 or an aggregation). The second are Indigenous Areas (IAREs) that are aggregates of the ILOC at a scale that enables more detailed socio-economic data (there are 430 of these across Australia). The third are Indigenous regions (IREGs) that correspond loosely to the former Aboriginal and Torres Strait Islander Commission (ATSIC) boundaries. There are 58 of these across Australia, they are aggregations of the IAREs, and they do not cut across State and Territory boundaries.

The nature and boundaries of this territorial classification is embedded within broader policies related to Indigenous peoples in Australia and related to the overall purpose of data and who is using it (Biddle, 2014^[80]). Historically, there have been different phases of public policies toward Indigenous Australians based upon protection and assimilation from European settlement until the 1960s (Rowse, 2006^[27]). In this period, enumeration was limited and based on the classification of Indigenous peoples into “full blood” and “half-caste” individuals. From the 1970s (after the 1967 referendum) interest shifted toward equality of socio-economic outcomes between Indigenous and non-Indigenous Australians. Therefore, focus also shifted to how Indigenous peoples could be better enumerated and incorporated into mainstream statistical frameworks and data collection through the census (Taylor, 2011^[81]; Jelfs, 2016^[82]).

Although there is a specific Indigenous Structure within the ASGS, it does not reflect traditional Indigenous territories, or contemporary local and regional Indigenous-led institutions. A simple way of indicating this is that the Indigenous Structure within the ASGS does not cut across State and Territory boundaries (for example, the Yorta Yorta Nation cuts across what is now northern Victoria and southern New South Wales). The organisation of statistics for traditional Indigenous territories may be challenging because boundaries are not clearly demarcated. It would be technically possible to undertake such a task based on the aggregation of smaller geographies, and would need to be based on negotiation with Indigenous peoples and institutions. This also relates to the critical point about the purpose of statistics and who is using them. If the use and analysis of statistics is demanded and led by local Indigenous-led institutions then the geographies may be different to those currently prescribed by governments. However, this is not common practice at the moment (Taylor, 2011^[81]).

Box 2.10. Considering Indigenous territories in standard statistical geography

Statistical agencies also tend not to consider how Indigenous peoples understand territory or geography. National statistical agencies work within their standard statistical geography, which provides them a framework for survey design, sample selection and data collection that has a geographical dimension. The boundaries, determined in the standard statistical geography, reflect how countries are divided into administrative units and in some cases functional economic areas. They tend not to consider how territorial lands of Indigenous peoples are formed.

Indigenous geography can exist within, or cut across the borders of the standard statistical geographies. Without this geography statistics are not going to be as useful as they could be for Indigenous peoples. The United States has sought to address this problem by introducing a Hierarchy of American Indian, Alaska Native, and Native Hawaiian Areas which works as a tool for data agents to collect more useful and accurate data for Indigenous peoples (U.S. Census Bureau, 2019^[83]).

This includes, for example:

- Hawaiian home lands (HHLs). Areas held in trust for Native Hawaiians by the state of Hawaii, pursuant to the Hawaiian Homes Commission Act of 1920, as amended. The Census Bureau obtains the names and boundaries for HHLs from state officials. The names of the home lands are based on the traditional *ahupua'a* names of the Crown and government lands of the Kingdom of Hawaii from which the lands were designated or from the local name for an area.

Being lands held in trust, HHLs are treated as equivalent to off-reservation trust land areas with the American Indian Trust Land/Hawaiian Home Land Indicator coded as "T."

- Joint-use areas. These are applied to any American Indian area by the Census Bureau, means an area that is administered jointly and/or claimed by two or more American Indian tribes. The Census Bureau designates legal joint-use areas as unique geographic entities equivalent to a reservation for the purpose of presenting statistical data.
- Off-reservation trust lands: These are areas for which the United States holds title in trust for the benefit of a tribe (tribal trust land) or for an individual American Indian (individual trust land). Trust lands can be alienated or encumbered only by the owner with the approval of the Secretary of the Interior or his/her authorized representative. Trust lands may be located on or off a reservation; however, the Census Bureau tabulates data only for off-reservation trust lands with the off-reservation trust lands always associated with a specific federally recognized reservation and/or tribal government.

Source: U.S. Census Bureau (2019^[83]), *2010 Geographic Terms and Concepts - American Indian, Alaska Native and Hawaiian Native Areas*.

Indigenous business data

Across OECD countries, there are generally inconsistent practices or gaps regarding identifying Indigenous businesses and producing statistics about them (OECD, 2019^[45]). Fragmented and inconsistent Indigenous business data makes it more difficult to target policies, monitor and evaluate programmes, and track progress. This is the case in Australia where data is limited, and there is no systemic way to self-identify business owners in the national statistical system. The ABS has developed a definition of an Indigenous owned business – but it has not been operationalised in the statistical system (Australian Bureau of Statistics, 2012^[84]). Indigenous-owned enterprises are defined in various ways across different levels of government and the private sector due to different percentages of Aboriginal ownership being applied (100%, 51%, 50%, and 25%). Different private and public sector entities may also add criteria related to the proportion of Indigenous people employed in the enterprise.

Data about Indigenous businesses is currently located in different government, not for profit and private sector organisations. The most comprehensive and up-to-date database is operated by Supply Nation. Supply Nation is a not-for-profit entity established in 2009 to link Indigenous business owners with private and public procurement opportunities (Supply Nation, 2019^[85]). Business owners need to register with Supply Nation which then undertake a 5-step verification process that involves cross checking with the Australian Business Registry and the Australian Securities and Investment Commission, verifying ownership documentation and Indigenous identity, and conducting audits and spot checks to ensure continued Indigenous ownership. The threshold is at least 50% Aboriginal and/or Torres Strait Islander ownership. These verification processes are critical to avoid the problem of business owners fraudulently claiming Indigenous identity and/or using silent partners to access preferential procurement programs (OECD Interviews – fact-finding mission, Australia July 2018). Indigenous Chambers of Commerce at a State and Territory level also have business databases that apply verification standards that are overseen by the First Australians Chamber of Commerce and Industry (New South Wales Indigenous Chamber of Commerce, 2019^[86]). Again, this is designed to facilitate access for Indigenous owned businesses into public procurement programs. Within the Australian Government, Indigenous Business Australia (IBA) also has a database which is based on the support it provides through business development and loan programmes (Indigenous Business Australia, n.d.^[87]).

There are two key problems inherent in the current approach. The first is that the lack of an agreed universal definition of what constitutes an Indigenous business. This not only makes it difficult to make

accurate statements about the size, composition and performance of the Indigenous business sector – it also increases regulatory compliance for Indigenous business owners. This could be resolved by introducing a standard question into the Australian business registry systems, the tax office, and business surveys undertaken by the ABS. Additional verification processes could then be employed based on this common database to access government support programmes. The second is that current databases are not linked, which would enable cross-checking and the creation of a larger pool of data to facilitate analysis and better targeting of programming and support. It would also reduce burdens on Indigenous businesses, as they would not have to go through multiple verification and registration procedures with different criteria. Current databases are also skewed toward accessing private and public procurement markets. This introduces a number of biases including sectoral (e.g. construction, food and hospitality, office supplies), size and capability to bid for procurement contracts, and location (most likely favouring urban centres where there is a greater density of public procurement opportunities). The current approach may marginalise micro and small businesses, those in sectors outside of procurement markets such as tourism, and in rural and remote locations. This lack of data also makes them less visible and more marginal in policy debates.

Box 2.11. Indigenous business statistics: Practices in other jurisdictions

The Swedish Government collects data about Sámi Reindeer Herding; however, there is no ethnic identifier in their statistical system, which means Sámi engaged in other business activities are not captured in formal statistics. In New Zealand, there is a Māori tax code but it only relates to trusts or authorities, and it is voluntary. The Business Register in New Zealand also collects information about “economically significant enterprises” so also excludes a proportion of the business population. It is also possible in some jurisdictions (Canada and New Zealand) to collect information on owner-managers who self-identify as Indigenous. However, this also has shortcomings such as leading to an undercount because some individuals may own multiple businesses. The United States Census Bureau Survey of Business Owners and Self-Employed Persons (SBO) includes a standard question on race which is based on self-identification of having origins to the original peoples of North America and maintaining tribal affiliation or community attachment. This approach in the United States enables a more comprehensive and granular analysis of the Indigenous business sector.

Source: OECD (2019^[45]), *Linking Indigenous Communities with Regional Development*, <https://dx.doi.org/10.1787/3203c082-en>.

Reporting on well-being outcomes

Closing the Gap was set-up by the Council of Australian Governments’ (COAG) in 2008, and represents a joint effort between the Commonwealth and all Australian governments. It also provides a broader framework for Indigenous economic development and business policies. *Closing the Gap* is organised around seven themes, which cover aspects such as early childhood and school education, employment and health, and economic development. Targets and indicators are established across these different policy themes, and reported upon at a national and State and Territory level (Department of the Prime Minister and Cabinet, 2018^[88]). Some of these indicators – on employment, health care, and early childhood education and schooling - are also disaggregated by Australia’s territorial classification (Major Cities, Inner Regional, Outer Regional, Remote and Very Remote). These descriptive statistics reveal poorer outcomes and larger gaps between Indigenous and non-Indigenous peoples in remote areas. The *Closing the Gap* framework has been criticised for being too deficit focused, and not developing an understanding of how to capitalise on Indigenous assets and opportunities. After ten years, only three out of seven targets on track.

Box 2.12. Closing the Gap: Strategic framework

Priority Outcomes (<i>interlinked</i>)	
Safe healthy and supportive family environments with strong communities and cultural identity	
Positive child development and prevention of violence, crime and self-harm	
Improved wealth creation and economic sustainability for individuals, families and communities	
COAG targets and headline indicators	
COAG targets ('Closing the Gap' targets)	Headline indicators
Life expectancy	Post-secondary education – participation and attainment
Young child mortality	Disability and chronic disease
Early childhood education	Household and individual income
Reading, writing and numeracy	Substantiated child abuse and neglect
Year 1 to 10 attendance	Family and community violence
Year 12 attainment	Imprisonment and juvenile detention
Employment	
Strategic Areas for action	
Governance, leadership and culture	
Early child development	
Education and training	
Healthy lives	
Economic participation	
Home environment	
Safe and supportive communities	

Source: Survey response – Australian Government.

In December 2016, COAG agreed to refresh the *Closing the Gap* strategy. One of the weaknesses identified in relation to the initial framework was the limited involvement of Aboriginal and Torres Strait Islanders in the design, development and implementation of it, as well as not accounting for geographical variance. The Refresh included the release of a discussion paper, call for submissions, and a series of workshops with stakeholders and experts. In December 2018, COAG released draft targets, which largely refine the existing architecture of *Closing the Gap* (Council of Australian Governments, 2018^[89]). The employment indicators will include a stronger focus on young people, education will include a focus on pathways into post-secondary education, and there is a commitment to develop a target related to Indigenous people's access to, management and ownership of land. The Australian Productivity Commission will take a lead role in evaluating progress against the final targets, which will also take account of differences across urban, regional and remote areas.

Statistics about Indigenous peoples are produced on an annual basis by the ABS and the Australian Institute of Health and Welfare (AIHW) that cover demographics, health and welfare, and the use of government services. These Indigenous statistics are then used in the annual report produced by the Productivity Commission on the effectiveness and efficiency of government services (Productivity Commission, 2019^[90]). They also utilised in the biennial *Overcoming Indigenous Disadvantage Key Indicators Report*, which is also produced by the Productivity Commission. This report provides assessment of Indigenous well-being across 52 indicators in areas such as governance, leadership and culture, early childhood, education, health, home and safe and supportive communities. As with the *Closing the Gap* report, these service delivery outcomes are disaggregated by remoteness.

These statistical frameworks and reporting mechanisms have resulted in greatly improved depth and coverage of Indigenous data compared with the situation when Indigenous peoples were first included in the census in 1971 (Rowse, 2006^[27]). Despite this progress there are still a number of shortcomings in the data which was summarised in a 2014 paper for the Closing the Gap clearing house (Biddle, 2014^[80]). The needs of governments and researchers are generally well provided for whilst the needs of local Indigenous organisations are not as well met and resourced. Other gaps and challenges include: changes in self-identification; no longitudinal data across the life course; 5-year gap in the census; and lack of data for the right concepts that are useful to Indigenous communities and organisations. A key challenge is related to statistics for remote communities. This may be methodological (e.g. too small for the minimum threshold for the labour force survey), challenges related to the registration of births and deaths, costs of data collection, and language barriers.

Data is often not available at the right geographic scale that is useful for Indigenous peoples (Biddle, 2014^[80]). Overall, Indigenous statistical reporting by Australian Government agencies takes a sectoral approach (health, early childhood, school education, employment, housing etc.) and it is not complemented by a spatial approach to the analysis of well-being. This spatial approach would need to start with the region and Indigenous territory as the unit of analysis. For example, assessing economic, social and service delivery outcomes across different remote areas, identifying variances in levels and rates of performance, and identifying regions that have made progress (or not). This could then provide the basis for deeper case study analysis to identify institutional and geographic factors associated with changes in outcomes, and a basis for working with local Indigenous communities on strategies to address priorities. However, this geographic lens is missing at the moment. In addition, the statistical framework is also primarily designed within a framework designed by non-Indigenous peoples, and as such, may miss aspects of well-being that are important to Indigenous peoples.

Box 2.13. Community-based Indigenous data: Canada and the United States

Canada: Community well-being index

Indigenous Services Canada (ISC) has developed a Community Well-Being Index that measures the well-being of Indigenous (namely First Nations and Inuit) and non-Indigenous communities across Canada. It is based on the United Nations Development Programme's Human Development Index (HDI) and it encompasses indicators such as education, labour force activity, income and housing, leaving out indicators measuring the level of social capital or environmental factors. Communities are scored based on how they perform in these socio-economic indicators for years 1981-2016 (5-year periods). Prior to its first release, there was no method in place to track the level and development/ progress of Indigenous community socio-economic well-being. The community well-being index is the first attempt to measure systematically Indigenous well-being at a community level in Canada.

United States: My Tribal Data Tool

In 2017, the US Census Bureau launched the "My Tribal Data Tool". The My Tribal Area Tool is designed to give easy access to select statistics from the American Community Survey (ASC). The ASC provides disaggregated data on demographic, social, economic and housing statistics on an annual basis. For each tribal area, the tool provides maps, and data profiles. The Census bureau held a range of consultations with tribal leaders across the United States that identified the demand for easier access to statistics about tribal areas and reservations.

Source: Indigenous Services Canada (2019^[91]), *The Community Well-Being Index*, <https://www.sac-isc.gc.ca/eng/1100100016579/1557319653695> (accessed on 9 October 2019); U.S. Census Bureau (2019^[92]), *My Tribal Area*, <https://www.census.gov/tribal/> (accessed on 29 March 2019).

Inclusion of Indigenous values and perspectives in well-being indicator frameworks

As outlined earlier in this chapter, statistics are shaped by power-relations and are framed and collected for particular purposes. Over the past 50 years, the overall concern of Australian Governments (with variations in prioritisation and approach) is about how to achieve greater equity between Indigenous and non-Indigenous Australians. As a result, Indigenous Australians have been co-opted into the existing statistical frameworks designed by non-Indigenous Australians. This approach means that issues which are important to Indigenous peoples may not be prioritised or included. For example, roundtables and engagement with Indigenous Australians during the *Closing the Gap Refresh* revealed priorities in regards to culture, racism and discrimination, trauma and healing, disability and social inclusion. However, it is not clear how these priorities will be reflected or reported upon in the final framework.

The OECD has developed a way of assessing how dominant well-being frameworks can be adapted to include Indigenous values and perspectives (Table 2.19). Some of these issues are addressed by specific survey instruments through Australian Government agencies. The best example is the National Aboriginal and Torres Strait Islander Social Survey (NATISS) that is undertaken every 6 years (alternating on a three yearly basis with a population specific health survey) (Australian Bureau of Statistics, 2016^[69]). The NATISS does include indicators related to Indigenous languages, participation in cultural ceremonies and events, and racism and discrimination. It also provides Indigenous-specific reporting on measures of social capital, employment, community safety, justice, and health. This could potentially fill a gap in the indicator framework for initiatives such as *Closing the Gap*, but the survey is only undertaken every 6 years which means it is not reported on regularly making it difficult for its use in policy development and to inform planning and implementation. Sample sizes also do not permit the disaggregation of data to small geographic units.

There are also important gaps in the statistical framework. In terms of material well-being these activities that may be located outside of the market including hunting and subsistence and the role it plays in food security and community well-being, and traditional knowledge and livelihoods. There are also gaps in terms of indicators related to ownership and control over the use of land and waters for economic development (noting there is a commitment to address this in the refreshed *Closing the Gap* and Geosciences Australia and the CSIRO are undertaking work with local communities to map natural resources and culturally significant sites on country). In terms of quality of life, there are a number of gaps in the statistical framework. This includes specific social capital measures related to kinship, spiritual and cultural practices related to land and waters, consultation and engagement in decision-making, and the use of traditional knowledge in decision-making processes.

Table 2.19. Considerations for incorporating Indigenous perspectives into well-being frameworks

Dimensions	Description	Considerations for Indigenous peoples to measure well-being
Material conditions	Money, access to credit, equity	Indigenous-owned businesses, collective forms of asset ownership, and customary activities and subsistence (imputed income)
	Work skills, leadership, educational attainment, health	Customary activities and traditional knowledge
	Built infrastructure – roads, buildings, houses	Access to basic services, Indigenous ownership of assets
Quality of life	Social connections	Kinship and family relations (e.g. contact with elders), discrimination, language
	Air, water, land, flora and fauna	Land stewardship, control over access and use of land, spiritual and cultural values of land
	Civic participation and governance	Self-determination, duty to consult, legitimacy and cultural match of representative institutions
	Cultural aspects	Incorporation of traditional knowledge into decision-making, protection of cultural artefacts and sites

Source: OECD (2019^[45]), *Linking Indigenous Communities with Regional Development*, <https://dx.doi.org/10.1787/3203c082-en>.

These data gaps have significant consequences for the design and implementation of public policies. They mean that certain domains of Indigenous well-being are not visible, and by implication, valued. So for example, that role that customary hunting and gathering of food plays in the livelihoods of Indigenous Australians in remote areas is not reflected in economic development and employment policies for these communities (Altman, 2007^[93]). The lack of consistent data about Indigenous land use makes it more difficult to plan and mobilise land and water resources for economic development in a way that balances with the cultural and spiritual values. These data gaps also relate to how Indigenous peoples are included in the governance of data, who frames these debates, how statistical collections are conducted and resourced, and how and by whom statistics are used.

Indigenous data governance

This sub-section of the chapter discusses lessons, leading practices and challenges related to the following points:

- Including Indigenous representatives in the governance of national statistical agencies to provide advice on strategic and operational issues impacting on Indigenous peoples (e.g. definitions for statistical purposes, the design of well-being indicators and data collection methods).
- Implementing protocols and agreements to enable the pooling of data between different agencies to increase sample sizes and the availability of data.
- Adapting data collection methods to the needs of Indigenous peoples through interview-administered surveys in Indigenous languages that include communities in the data collection process.
- Providing tools and capabilities for Indigenous organisations to collect their own data on issues that are important to their communities, and support more informed decision-making about development.

Inclusion in governance decision-making

The ABS has two main governance mechanisms to include Indigenous peoples in the development data, methodological issues, and the release, dissemination and use of data. The first is an advisory body - the Roundtable on Aboriginal and Torres Strait Islander Statistics – that was established in 2013 (Australian Bureau of Statistics, 2017^[94]). This advisory body provides advice on operational issues related to the enumeration of Indigenous Australians and improving data quality. Its membership is made up of Indigenous peoples who have experience of working with Indigenous communities on data issues. The second are Engagement Managers and Engagement Officers located in various State and Territories offices throughout Australia. These staff engage directly with Indigenous communities and institutions to increase understanding of ABS data and tools, provide statistical training, and improve the quality and relevance of statistics for Indigenous peoples (Jelfs, 2016^[82]). The work by the ABS on Indigenous issues is coordinated by the Centre of Excellence for Aboriginal and Torres Strait Islander Statistics. Its functions include informing and engaging with Indigenous peoples and institutions, assessing and identifying improvements to the statistical framework, improving enumeration, and assisting Indigenous institutions in the use of statistics (Australian Bureau of Statistics, 2019^[95]). This approach is similar to existing practices in Canada and the United States (Box 2.14).

Box 2.14. Inclusion of Indigenous peoples in the governance of national statistical agencies – cases of Canada and United States

Canada

Statistics Canada has a similar engagement programme with Indigenous communities. The Aboriginal Liaison Program advisors build relationships with Aboriginal organizations and communities, help them determine their data needs, help them find and understand the data that is available for their communities, and keep them informed about Statistics Canada information activities. Aboriginal Liaison Advisors are located across each Province and Territory (with the exception of Atlantic Canada which groups Nova Scotia, Prince Edward Island, New Brunswick and Newfoundland). The organisation interacts with a number of National Indigenous Organizations (NIOs) at the working level where NIOs help provide context to Statistics Canada’s analytic research work on Indigenous populations.

US Census Bureau

The Inter-governments Affairs Office (IAO) of the U.S Census Bureau serves as the principal coordination point for tribal affairs and is the advisor to the director and executive staff on tribal issues and concerns. The role of IAO includes coordinating across Federal Government agencies on data issues and collaborating with tribal leaders and national organisations. Its core activities include:

- Developing and promoting use of the “My Tribal Area” data tool.
- Tribal Affairs Liaison team that works directly with tribal leaders.
- Supporting the Remote Alaska Enumeration Team.
- Promoting census products and disseminating information to tribes.

Source: Statistics Canada (2018^[96]), *Aboriginal Liaison Program*, <https://www.statcan.gc.ca/eng/aboriginal-liaison-program> (accessed on 29 March 2019); U.S. Census Bureau (2019^[92]), *My Tribal Area*, <https://www.census.gov/tribal/> (accessed on 29 March 2019); U.S. Census Bureau (2018^[97]), *Tribal Affairs - Intergovernmental Affairs Office*, <https://www2.census.gov/programs-surveys/aian/overview-tribal-affairs-office.pdf> (accessed on 29 March 2019).

Linking and sharing data

The pooling of data between different agencies can help overcome the challenge of gaps in the statistical framework, and poor quality of data. It can enhance the identification of Indigenous peoples and enable new forms of analysis that would not be possible with single data sets (Dugbaza, Scott and McKeown, 2012^[98]). Data sharing between Australian Governments and agencies is recognised as a complex issue, particularly where there are barriers to data sharing (Survey response – Australian Government). Data is also held by State and Territory Governments, particularly departments and agencies responsible for health, school education, and justice. Schedule F (Agreed data quality improvements) of the National Indigenous Reform Agreement identifies a number of actions to link and share data, and improve its quality (Council of Australian Governments, 2012^[77]). The first is linking ABS census records (Commonwealth responsibility) with death registration records (State responsibility) to assess under-identification of Indigenous mortality and compile more accurate life expectancy estimates. The other is for the ABS and the AIHW (Commonwealth agencies) to work in partnership with all jurisdictions to implement guidelines for linking data that covers linkage methods, protocols, privacy protocols, quality standards and procedures (Box 2.15). However, there is no ongoing mechanism to monitor progress in regards to linking Indigenous data sets between levels of government.

Box 2.15. National best practice guidelines for data linkage activities relating to Aboriginal and Torres Strait Islander People, 2012

The best practice guidelines for data linkage activities related to Indigenous peoples covers six principles:

- Principle 1: Values and ethics in Aboriginal and Torres Strait Islander research: the conception, design and conduct of all Aboriginal and Torres Strait Islander data linkage activities for statistical purposes should be guided by the core values and ethics of Aboriginal and Torres Strait Islander human research.
- Principle 2: Quality of Indigenous status information in data collections: the quality of Indigenous status information within data sets included in the linkage study should be considered before analysis.
- Principle 3: Quality of linkage variables: Linkage variables should be assessed before linkage to gauge their accuracy, completeness and comparability, and to ensure they are of sufficient quality to support the purposes of the linkage study.
- Principle 4: Assessment of quality of data linkage: the quality of data linkage should be assessed and understood. Any limitations arising from the quality of the data linkage should be taken into account in the analysis of the linked data.
- Principle 5: Methods for deriving Indigenous status: analysts should investigate multiple methods for deriving Indigenous status and select those that best fit the purpose of the analysis. Where possible, analysts should also explore and report the impact of using various methods to derive Indigenous status on health and wellbeing measures and indicators.
- Principle 6: Transparency: all relevant aspects of the data linkage activity, including data linkage quality assessment, analysis of the linked data, and methods for deriving Indigenous status, should be fully documented and publicly reported.

Source: Dugbaza, T., B. Scott and S. McKeown (2012^[98]), *National Best Practice Guidelines for Data Linkage Activities Relating to Aboriginal and Torres Strait Islander People*, <https://www.aihw.gov.au/reports/indigenous-australians/national-best-practice-guidelines-for-data-linkage/contents/table-of-contents> (accessed on 20 March 2019).

The other aspect of this issue is sharing analysis that has been undertaken by Government agencies. The Closing the Gap Clearinghouse was established as a single point for sharing government commission research and analysis related to improving Indigenous outcomes. The Australian Institute of Health and Welfare in collaboration with the Australian Institute of Family Studies was funded from 2009 to 2014 to deliver this Clearinghouse. It included briefs and papers prepared for policy makers that provided a systematic review of the current research and evaluation evidence from Australia and elsewhere. These reports are currently located on the website of the AIHW (Australian Institute of Health and Welfare, 2019^[99]). The website includes over 300 reports and papers related to research about Indigenous Australians. Of these, only one deals specifically with Indigenous entrepreneurship and four engage with labour market issues. The vast majority deal with health issues, and some of school education and housing issues, which indicates the social policy research and evaluation focus of Commonwealth Government agencies on Indigenous issues.

Adapting data collection methods

The ABS has an Indigenous Community Engagement Strategy that includes a focus on how to improve the enumeration of Indigenous peoples and to ensure culturally appropriate engagement (Jelfs, 2016^[82]). This strategy is delivered by Engagement Managers and Engagement Officers within the ABS (discussed

earlier in the chapter). These staff also deliver cross-cultural training to ABS staff working with Aboriginal and Torres Strait Islander peoples. They have also produced internal protocols and procedures to guide the work of staff with Indigenous peoples. A recent review of these protocols resulted in a streamlining of the ABS's approach to engagement, which also recognises the risk of engagement and respondent burden (Jelfs, 2016^[82]; Department of the Prime Minister and Cabinet, 2018^[24]).

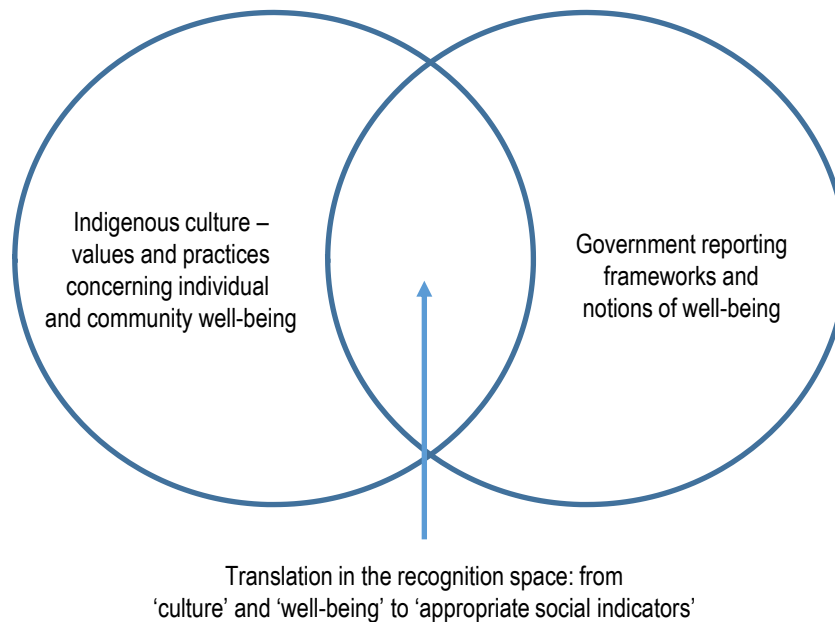
There are also specific strategies put in place to increase census response rates. This includes use of peer-to-peer platforms, designing specific messages and communications material for different communities, and engaging with communities to identify people to undertake interviewing and promote a particular survey or the census. Particular methodological challenges associated with the different circumstances of Indigenous peoples living in remote communities are also addressed by the ABS. These issues are taken into account in the six yearly NATSISS. In this case ABS interviewers are accompanied by local Indigenous facilitators to conduct interviews. A high proportion of respondents in remote areas use pen and paper (face-to-face) interviews while in non-remote areas interviews are computer assisted (Webster, Rogers and Black, 2006^[100]).

Providing tools and capabilities to collect data and support informed decision-making

There is a large amount of administration data related to services and programs delivered for Indigenous peoples. Some of these services are delivered by Indigenous organisations. These organisations are required to provide data on the implementation and outcomes on government funded programs, which will vary between departments and agencies, and levels of government. In the health sector, there are examples of where Indigenous organisations have been funded by governments to collect information that is both for programming and service purposes, and to improve local planning, evaluation and monitoring (Australian Government – survey response). One example is the National Key Performance Indicators for Aboriginal and Torres Strait Islander Primary Health Care (Australian Institute of Health and Welfare, 2018^[101]). Indigenous organisations are engaged in the development of these indicators. Although there is a range of administrative data sets linked to government services - there is no systematic ways of providing data and tools to support local Indigenous community and economic development efforts.

This would require a different orientation for the use of data, from one that is government-led, to one that is led by Indigenous peoples. This orientation connects to global debates about Indigenous data sovereignty, which is defined as the right of Indigenous peoples to govern the creation, collection, ownership and use of their data (Kukutai and Taylor, 2016^[102]). It means developing social and economic indicators in a way that blends traditional and modern knowledge (Taylor, 2007^[103]) conceptualises this as a 'recognition space' that is based on meaningful engagement and creating indicators that reflect Indigenous values and perspectives (Figure 2.28). There are a few examples of one-off projects where Indigenous organisations have applied these principles to collect and organise data in a way that tells a story about their own communities.

Figure 2.28. The recognition space for indicators of Indigenous well-being



Source: Taylor, J. (2007^[103]), "Indigenous peoples and indicators of well-being: Australian perspectives on United Nations Global Frameworks", <http://dx.doi.org/10.1007/s11205-007-9161-z>.

The Yawuru people of Broome are one First Nation that has taken a leadership role in creating their own indicator framework and undertaking a survey to guide community and economic development (Yap and Yu, 2016^[104]). The aim of undertaking this survey and publishing the results were to (i) better understand the community, its characteristics and well-being; and, (ii) generate data to guide community strategies and policies for Yawuru people. The well-being framework is grounded in the concepts of *bugarringarrn* (traditional knowledge and practices of time immemorial) and *mabu liyan* (Yawuru idea of the good life based on interconnectedness between country, people and culture) and finding an appropriate balance between them and the modern world. The framework is organised around seven dimensions: Family and well-being; Community and well-being; Strong culture, strong country, strong identity, Self-determination, rights and autonomy; Health and well-being; Material well-being; and, Subjective well-being. The indicators have a strong focus on issues such as connections to family and community, Indigenous languages, access to country, freedom from discrimination, the acquisition of cultural knowledge, hunting and fishing, and sharing catch and kill (Table 2.20). They survey findings were released in 2016 and now provide a baseline to understand community preferences, and strengths and weaknesses.

The creation of this recognition space for the Yawuru required strong local institutions, supportive institutional relationships that give access to resources and expertise, and an inclusive and participatory research methodology. The basis for this was the settlement of native title (Indigenous property rights) in 2010, which gave the community the clarification, resources and institutional structures to undertake this work. In 2011, the board of Nyamba Buru Yawuru (NBY) Ltd (the Prescribed Body Corporate for the Native Title Settlement) made a resolution to undertake a comprehensive local population survey to provide a basis for its community planning and social housing strategies. A key motivation was that high quality and fine-grained data on the Yawuru was not available from the census, and the 2006 census findings revealed an under-count of the resident Indigenous population in Broome. Funding was provided by the Commonwealth and State governments to undertake the survey, advice and support was provided by the Australia National University (ANU), a local not-for-profit was engaged to do it (the Kimberley Institute), and 20 local Aboriginal people were recruited as part of the team to undertake the survey. The survey enabled detailed assessment about the size, age structure, permanency, housing status, location, and

language groups of local Indigenous peoples. Importantly, it also put data in the hands of NBY and the Yawuru to support informed decision-making.

Table 2.20. Yawuru wellbeing survey: framework and indicators

Domain	Indicators
Family and wellbeing	<ul style="list-style-type: none"> • Frequency of family connection • Ability to get help from family and friends all or most of the time • Most pressing issue facing the community (e.g. access to fishing and hunting sites, health services, management of natural resources, jobs) • Type of community participation • Acquisition of cultural knowledge • Access to country for fishing and hunting and practicing traditional culture • Languages learnt during childhood • Language abilities (listening, reading, writing, speaking)
Self-determination, rights and autonomy	<ul style="list-style-type: none"> • Feeling respected and opinions valued • Feelings of vulnerability to being discriminated • Sense control over different life domains (own life, family, community, country) • Opportunities to have a say over the management of land and sea
Health and well-being	<ul style="list-style-type: none"> • Self-reported health status • Chronic health conditions • Positive and negative feelings about yourself • Feelings of belonging, connectedness, identity and purpose
Material well-being	<ul style="list-style-type: none"> • Housing • Access to transportation • Employment status • Educational attainment • Income sufficiency • Main sources of income
Subjective well-being	<ul style="list-style-type: none"> • Overall life satisfaction

Source: Yap, M. and E. Yu (2016^[104]), *Community Wellbeing from the Ground Up: A Yawuru Example*, Curtin University, <https://www.curtin.edu.au/local/docs/bcec-community-wellbeing-from-the-ground-up-a-yawuru-example.pdf>.

With this baseline in place, in 2013, the Yawuru commenced their wellbeing project that culminated in the survey in 2015. Two women led the work, Mandy Yap from the Central for Aboriginal Economic Policy Research (CAEPR) at the ANU, and Eunice Yu, a Yawuru woman working at the local Kimberley Institute who oversaw the research team. Again, institutional relationships and Indigenous oversight of the process was very important. The project was undertaken as a collaboration between the CAEPR, the Kimberley Institute, Curtin University, and other local partners, and was informed by a Yawuru Wellbeing Project Reference and Guidance Committee. A participatory research methodology was employed which had three stages:

1. Face to face semi-structured interviews to conceptualise Yawuru's ideas of a good life and *mabu liyan*.
2. Focus group activities to select relevant indicators of wellbeing generated from the themes arising from the interviews.
3. Presentation of potential indicators back to the community for discussion, refinement and validation.

The Yawuru case shows how Indigenous data sovereignty can work in practice. There were a number of elements that can together in this case. The first was the clarification of Indigenous property rights and the

establishment of a local institution NBY Ltd. that oversee and drive the process. The second were institutional relationships (with governments, universities, and local organisations) that enabled the community to access resources and expertise to undertake the work. The third was a collaborative and participatory process to develop the indicators, conduct the field work, and produce the findings. The Yawuru now have a body of knowledge that is owned by them and is guiding community planning and economic development efforts. This framework is based on a balance between traditional knowledge and values and non-Indigenous notions of well-being.

However, this case is not the norm across Australia where institutional discussions about Indigenous data sovereignty are just starting (Kukutai and Taylor, 2016^[102]; Australian Indigenous Governance Institute, 2018^[105]). At a very basic level, data is essential to the provision of public goods and high-quality local area data is essential to implementing place-based approaches to Indigenous economic development. The quality of local area data for Indigenous peoples is poor and fragmented. Indigenous data sovereignty can be a vehicle to improve it and there are a number of elements that need to be place to realise its potential:

- Support for Indigenous-led institutions to develop data governance models, research ethnics guidelines, and protocols for data use and sharing.
- Platforms for Indigenous communities to disseminate these tools, build capacity, and share lessons and good practices.
- Prioritising support for higher education research into Indigenous data and community and economic development.
- Providing seed funding for Indigenous-led data projects and development of local indicators, data analytics and GIS capabilities (and promoting philanthropic and private sector co-investment in these efforts).

Elements of these principles are being applied across OECD member countries (Box 2.16) (Lovett et al., 2018^[106]).

Box 2.16. Indigenous data sovereignty

'Indigenous Data sovereignty' is the management of information in a way that aligns with the laws, practices and customs of a nation-state in which it is located. Articles 18 and 19 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) have reinforced the importance of Indigenous data sovereignty, stipulating that specifies that "Indigenous peoples have the right to participate in decision-making in matters which affect their rights", and that "states are required to 'consult and cooperate in good faith with Indigenous peoples through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them". In answer to this call, there have been a proliferation of guidelines how to deliver on these principles.

Table 2.21. IDS principles in the Asia Pacific and North American States

	Organisation(s)	Principles
New Zealand	Aotearoa/NZ. Te Mana Raraunga, the Maori Data Sovereignty Network	<ul style="list-style-type: none"> • Whakapapa and whanaungatanga: Recognising the connectedness between the material, natural and spiritual worlds • Rangatiratanga: Iwi(tribal)/Maori rights to own, access, control and possess data from them or about them and their environs • Kotahitanga: Collective vision and unity of purpose • Manaakitanga: Ethical data use to progress iwi/Maori aspirations for wellbeing • Kaitiakitanga: Sustainable data stewardship

United States	US Indigenous Data Sovereignty Network (USIDSN)	<ul style="list-style-type: none"> The USIDSN is in the principle's development phase. Draft principles include recognition of inherent sovereignty; protection of Indigenous data; a commitment to aligning with Indigenous values for intergenerational collective wellbeing; a focus on relationships between Indigenous nations and other stakeholders; for Indigenous Data Governance; and the honouring of Indigenous knowledge.
Canada	First Nations Information Governance Center OCAP®	<ul style="list-style-type: none"> Ownership of data; Control - First Nations hold on how the data are collected, used and disclosed; Access - whereby First Nations have access to any data about them; and Possession - whereby all First Nations data fall within First Nations jurisdiction.
Australia	Maiam nayri Wingara	<ul style="list-style-type: none"> Exercise control of the data ecosystem including creation, development, stewardship, analysis, dissemination and infrastructure. Data that is contextual and disaggregated (available and accessible at individual, community and First Nations levels). Data that is relevant and empowers sustainable self-determination and effective self-governance. Data structures that are accountable to Indigenous peoples and First Nations. Data that is protective and respects our individual and collective interests.

Source: Lovett, R. et al. (2018^[106]), *Good Data Practices for Indigenous Data Sovereignty and Governance*, <https://static1.squarespace.com/static/5b3043afb40b9d20411f3512/> (accessed on 21 March 2019).

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Notes

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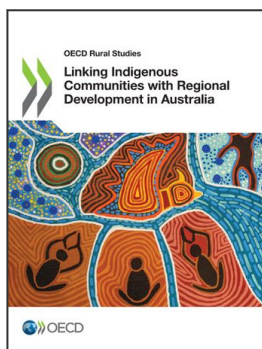
Life expectancy: Calculations based on data drawn from Australian Institute of Health and Welfare for Australia (2018^[110]), *Deaths in Australia*, <https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/life-expectancy>; data provided by Statistics Canada; data provided by Statistics New Zealand on 21 December 2018; Indian Health Service for the United States (2018^[111]), *Disparities*, <https://www.ihs.gov/newsroom/factsheets/disparities/>.

Annex 2.A. TL3 Regions in Australia

REG_ID	REG_NAME	TL	ISO_3	TPOLOGY
AU101	Capital Region	3	AUS	PR
AU103	Central West	3	AUS	PR
AU104	Coffs Harbour - Grafton	3	AUS	PR
AU105	Far West and Orana	3	AUS	PR
AU106	Hunter Valley Exc Newcastle	3	AUS	IN
AU107	Illawarra	3	AUS	PU
AU108	Mid North Coast	3	AUS	PR
AU109	Murray	3	AUS	PR
AU110	New England and North West	3	AUS	PR
AU111	Newcastle and Lake Macquarie	3	AUS	PU
AU112	Richmond - Tweed	3	AUS	IN
AU113	Riverina	3	AUS	PR
AU114	Southern Highlands and Shoalhaven	3	AUS	IN
AU1GS	Sydney	3	AUS	PU
AU201	Ballarat	3	AUS	IN
AU202	Bendigo	3	AUS	IN
AU203	Geelong	3	AUS	IN
AU204	Hume	3	AUS	PR
AU205	Latrobe - Gippsland	3	AUS	PR
AU215	North West	3	AUS	PR
AU216	Shepparton	3	AUS	PR
AU217	Warrnambool and South West	3	AUS	PR
AU2GM	Melbourne	3	AUS	PU
AU306	Cairns	3	AUS	IN
AU307	Darling Downs - Maranoa	3	AUS	PR
AU308	Fitzroy	3	AUS	IN
AU309	Gold Coast	3	AUS	PU
AU312	Mackay	3	AUS	PR
AU315	Queensland - Outback	3	AUS	PR
AU316	Sunshine Coast	3	AUS	IN
AU317	Toowoomba	3	AUS	IN
AU318	Townsville	3	AUS	IN
AU319	Wide Bay	3	AUS	PR
AU3GB	Brisbane	3	AUS	PU
AU405	Barossa - Yorke - Mid North	3	AUS	PR
AU406	South Australia - Outback	3	AUS	PR
AU407	South Australia - South East	3	AUS	PR
AU4GA	Adelaide	3	AUS	PU

AU501	Bunbury	3	AUS	PR
AU508	Western Australia - Outback	3	AUS	PR
AU509	Western Australia - Wheat Belt	3	AUS	PR
AU5GP	Perth	3	AUS	PU
AU601	Hobart	3	AUS	IN
AU602	Launceston and North East	3	AUS	IN
AU603	South East	3	AUS	PR
AU604	West and North West	3	AUS	PR
AU701	Darwin	3	AUS	IN
AU702	Northern Territory - Outback	3	AUS	PR
AU801	Australian Capital Territory	3	AUS	PU
AUZZZ	Australia, not regionalised	3	AUS	NULL

Note: Predominantly urban (PU); Intermediate (IN); Predominantly Rural (PR)



From:
Linking Indigenous Communities with Regional Development in Australia

Access the complete publication at:

<https://doi.org/10.1787/ab4d8d52-en>

Please cite this chapter as:

OECD (2020), "Indigenous well-being, statistical frameworks and data governance", in *Linking Indigenous Communities with Regional Development in Australia*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/41653333-en>

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