

WORKING PAPERS

No. 1, 2016

Northern Territory population futures.

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Abstract

Background

Knowing how many people there are likely to be, and their characteristics and location, is important in anticipating the demand for a wide range of both public and private sector goods and services.

Aims

This paper provides a brief overview of recent demographic trends in the Northern Territory, and then presents six scenarios for the future under alternative social, economic, political and demographic circumstances.

Data and methods

Population projections were prepared using a state-of-the-art projection model. The six scenarios differ in their future migration assumptions given that migration is the most variable and uncertain demographic variable affecting the Territory's population.

Results

The future of the Territory's total population is very uncertain and may be anywhere between 250,000 and 500,000 by mid-century. However, some aspects of the Territory's future demography (such as continued population ageing) are much more certain.

Conclusions

Population forecasts for the NT are useful for the short-term, but beyond that, scenarios and prediction intervals which indicate uncertainty have to be used. Flexible planning is required to accommodate uncertainty about the demographic future.

Keywords

Northern Territory, population projections, scenarios, uncertainty

Acknowledgments

The author is grateful for helpful comments from Tony Barnes and Andrew Taylor on an earlier draft of the paper.

I. Introduction

What will the Northern Territory’s demography look like in 5, 10, 20 and 30 years’ time? Knowing how many people there are likely to be, and their characteristics and location, is important in anticipating the demand for a wide range of both public and private sector goods and services. Figure 1 presents some examples across the extent of the life course, ranging from maternity services and childcare to aged care and funerals. Demography also plays an important role in the supply of labour, the distribution of GST funds to the Territory, tax revenue raised locally, and the number and boundaries of electoral divisions, amongst other things (Corr 2015; Wilson et al. 2005). More broadly, it forms a key element of debates about the development of the Territory and northern Australia, and the role they could play within the national economy and settlement system (Australian Government 2015).

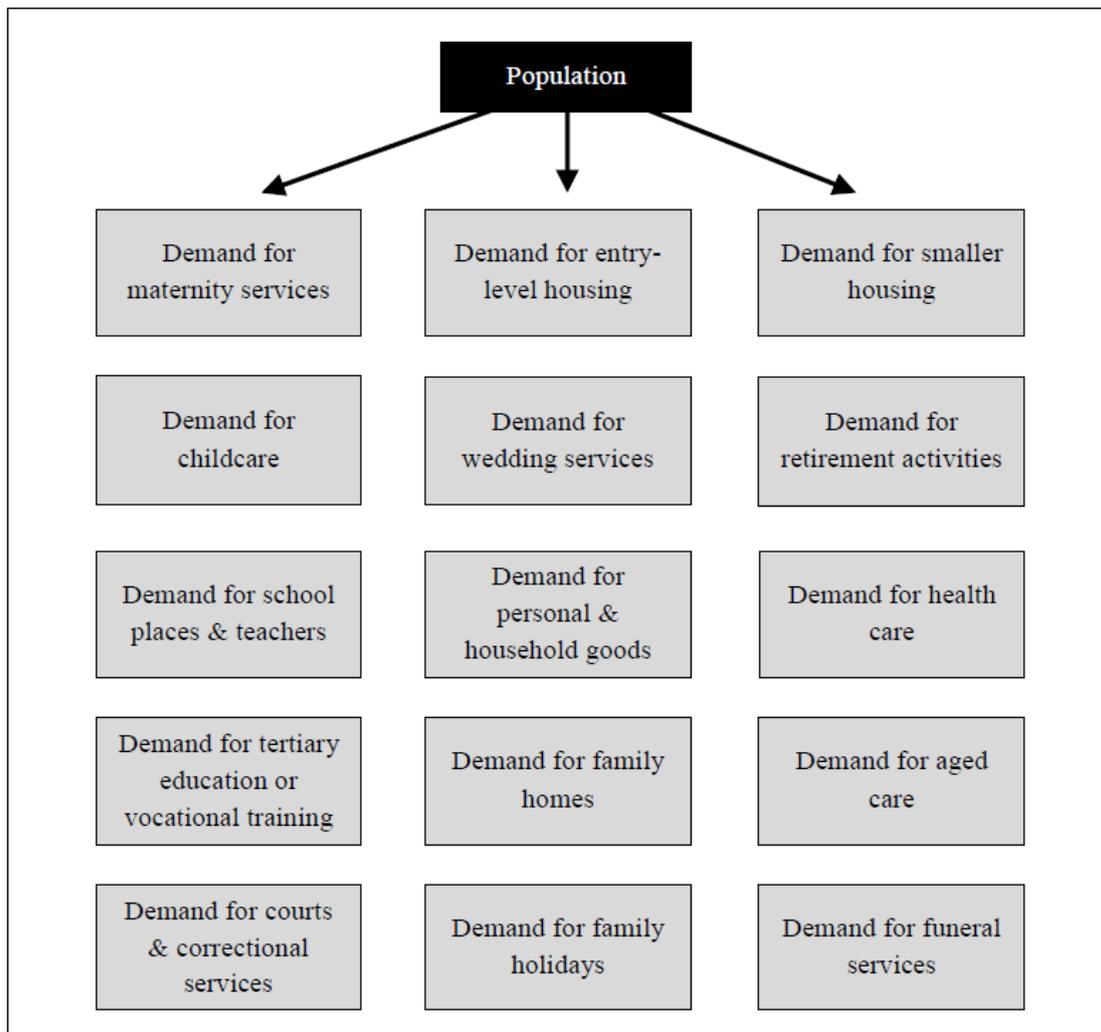


Figure 1: Examples of the influence of population on the demand for goods and services across the life course

However, forecasting the Northern Territory’s population is far more challenging than for any other jurisdiction of Australia (Wilson 2012; Taylor 2014). This is for a number of reasons.

- The cyclical and highly variable nature of employment growth in the Territory creates volatile migration trends (Carson 2016). Interstate migration tends to be erratic, switching from high net

migration gains to large net migration losses within a couple of years. The economic drivers of these changes are hard to predict. Overseas migration is also volatile and difficult to forecast.

- The Territory’s population is also relatively small, and small populations are subject to greater random variation in demographic trends than large state populations of many millions.
- There is a sizeable Indigenous population, data for which is less accurate and less timely than that for the Australian population as a whole (Wilson and Barnes 2007). It is therefore more difficult to establish recent demographic trends for the Indigenous population.

A comparison of projections of the Territory’s population with subsequently published Estimated Resident Populations (ERPs) demonstrates the extent of the forecasting challenge. Figure 2 shows Percentage Errors of ABS population projections for the Northern Territory published over the last 40 years. Projections just 5 years out have been in error between +10% (10% higher than the ERP) and -8% (8% too low); at 10 years out errors range from +14% to -13%. Projections for 20 years into the future have had errors between +29% and -13%. Average absolute errors were 3% after 5 years, 6% after 10, and 13% after 20 years. These results are not surprising and are consistent with existing research on forecast errors for subnational jurisdictions and regions (e.g. Statistics New Zealand 2008; Wilson 2012).

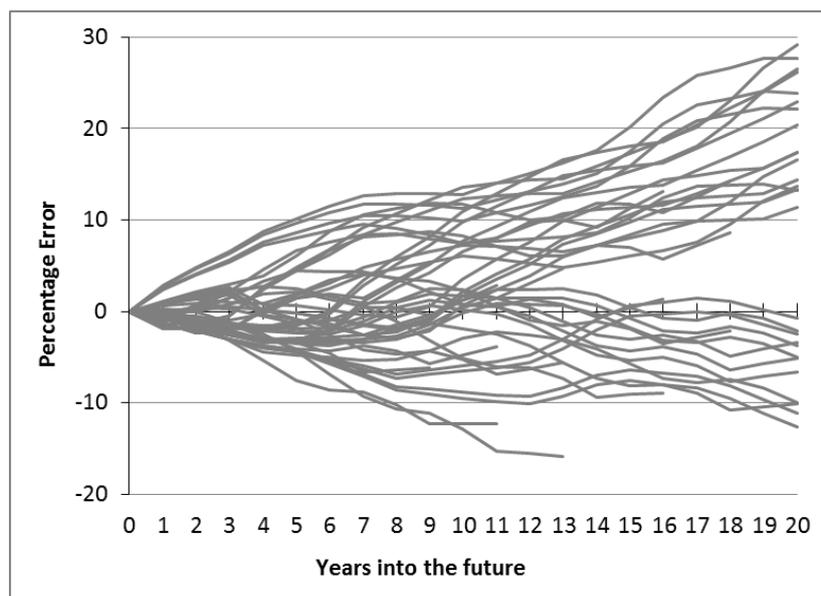


Figure 2: Percentage Errors of past projections of the Northern Territory’s population

Note: Percentage Error = (Forecast – ERP) / ERP × 100%. Positive errors denote forecasts which were too high; negative errors indicate forecasts that are too low.

Source: Calculated from ABS ERPs and all main projections series (e.g. A, B and C)

Unfortunately this suggests that, barring a huge breakthrough in forecasting methodology, our ability to forecast the Northern Territory’s demographic future will remain limited. Accuracy tends to deteriorate rapidly with time so that for small populations like that of the Territory projections for more than a few years ahead are usually not particularly reliable. Although it is impossible to know exactly what forecast errors will eventuate in the future, the distribution of past errors shown above provides an approximate guide to the likely range of errors which can be expected in the future.

However, it is possible to create a range of hypothetical scenarios to demonstrate how the Territory's population would evolve under different assumptions about the future. Scenarios are useful because they permit measurement of the demographic responses to particular social, economic, demographic, or political stimuli or conditions. Some scenarios may be quite likely to eventuate while others might be quite unlikely; some may be desirable, but others may describe futures that really ought to be avoided. Scenarios can also describe the likely upper and lower bounds of future population if they are based on demographic rates (fertility, mortality, and particularly migration) at the upper and lower ends of historical distributions. The aim of this paper is to present six future scenarios for the Territory to help inform discussions about its demographic future.

Following this Introduction, a brief overview of the Northern Territory's demography is provided in section 2 to provide some context for the projections. Section 3 introduces the six future scenarios and describes the data and methods used in the projections. The demographic outcomes of those scenarios are presented in section 4, and then the final section offers points of discussion and conclusion.

2. Overview of demographic change in the Northern Territory

According to the Australian Bureau of Statistics, the total Estimated Resident Population (ERP) of the Northern Territory reached a record high of 244,300 in mid-2015 (ABS 2016). Figure 3 shows how the Territory’s total ERP has changed from 1971 onwards. Figures for the last few years are dashed, signifying a preliminary status, and will be revised following the 2016 Census. Mostly, the trend is one of growth, especially in the late 1970s and early 80s, mid-90s and mid-2000s, though it was interrupted by Cyclone Tracy in 1974, and subsequently there have been short periods with little or no growth, such as in 2002-03 and most recently.

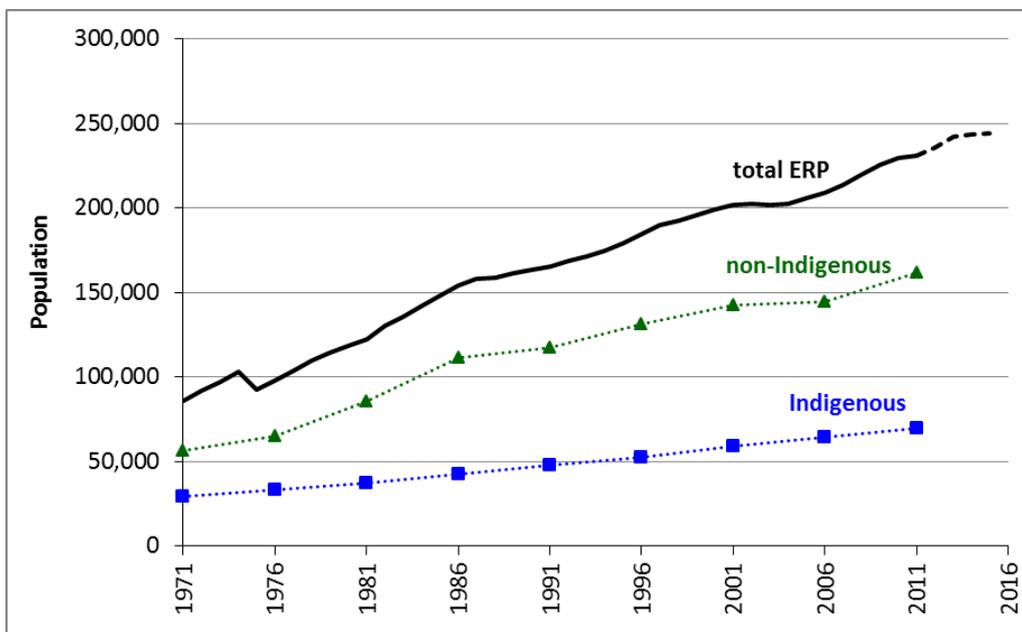


Figure 3: The population of the Northern Territory, 1971-2015

Note: The dashed line for total population in recent years represents preliminary figures which will be adjusted in due course following the 2016 Census.

Source: ABS (total populations); Wilson 2014 (populations by Indigenous status)

Estimates of Indigenous populations for census years are also shown. These were estimated by working backwards from modified 2011 Indigenous ERPs accounting for births, deaths and migration (Wilson 2014). Non-Indigenous populations were calculated by subtracting Indigenous population estimates from total ERPs. Over the period shown in Figure 3, the Territory’s Indigenous population steadily increased, reaching about 69,600 by 2011 (30% of the total). The non-Indigenous population grew at varying rates over the period, numbering about 161,700 by 2011 (70%).

At the most general level, population growth is the result of natural change (births minus deaths) and net migration (inward migration minus outward migration). Figure 4 shows how these two components have contributed to the annual growth of the Territory’s population since 1971. Total annual growth of the population, shown by the dashed line, has proved highly variable. With the exception of 1974-75, growth has most been between 0 and 8,000 per year. As can be seen, natural change has been relatively stable, but net migration has been highly volatile.

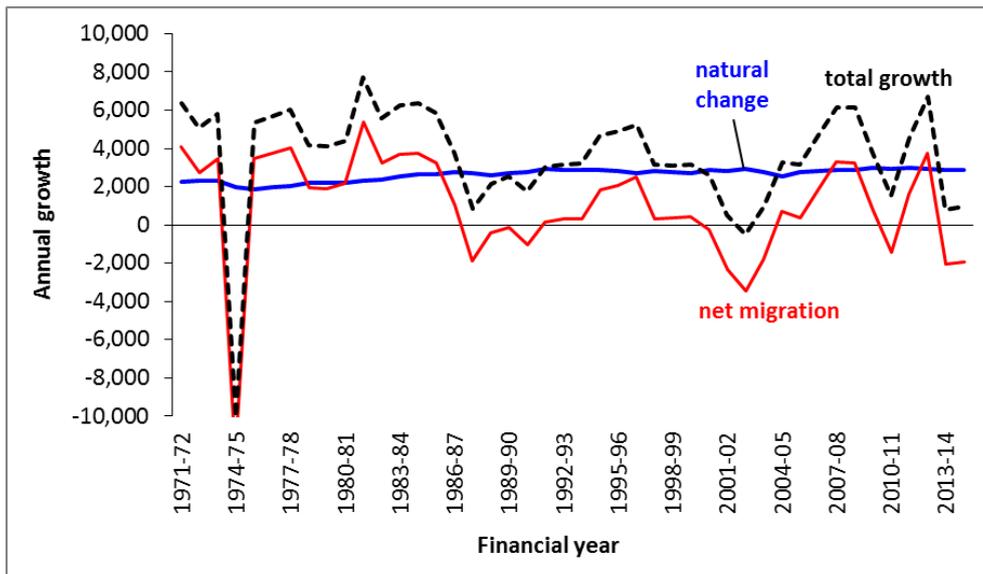


Figure 4: Summary components of population change in the Northern Territory, 1971-2015

Note: Net migration refers to net overseas and net interstate migration combined; it was calculated as population growth minus natural change.

Source: ABS

The volatility of net migration is partly due to the Territory having a small, vulnerable economy which is influenced to a large extent by external factors. The public sector is relatively large and the private sector is dominated by mining, construction and services (NT Government 2016; Carson 2009). Decisions on defence force staffing in the Territory are made elsewhere. Territory government funding is highly dependent on federal government assistance, such as the distribution of GST revenue (Corr 2015). The private sector is affected by factors such as the lifecycle of big industrial projects, global commodity prices, and the variable demand for tourism. These economic forces flow through into migration outcomes because residence in the Territory is strongly connected to employment. Many NT residents born outside the Territory have moved to the Territory for work reasons with the intention of staying for a fixed period of time; many NT residents born in the Territory expect to move away at some point in the future (Wilson 2006).

The age-sex structure of the Territory's population is quite different to that of Australia as a whole. Compared to the national population, the Territory has a smaller proportion of people in the elderly age groups, and greater proportions in the childhood and working ages. In 2015, just 7% of the population was aged 65 or over, compared to 15% for the national population, while 71% were aged 15-64 (66% nationally) and 22% aged 0-14 (19% nationally) (ABS 2016). The age-sex structure of the population by Indigenous status is shown by the population pyramid of Figure 5. The Indigenous population's age-sex structure is primarily shaped by high fertility and high mortality rates. However, migration is the main demographic process shaping the non-Indigenous age-sex structure. Figure 6 shows the net interstate migration gains and losses for the Territory recorded by the census for the period 2006-11. There are generally net interstate migration gains in the young adult ages, and net losses at other ages. In addition to being highly age-variant, these migration patterns are not distributed evenly by gender either, resulting in a male-dominant non-Indigenous population. In 2011 there were 115 non-Indigenous men for every 100 women, a figure which rises to 129 men per 100 women for those aged 20-24. In the Australian population as a whole the numbers of males and females are close to being equal.

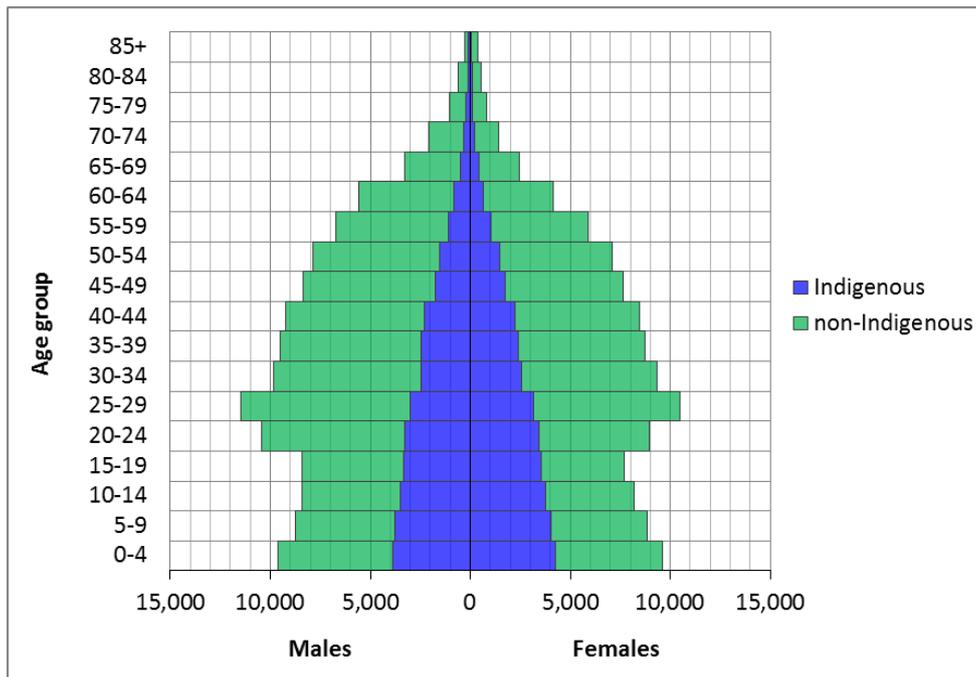


Figure 5: The age-sex structure of the Northern Territory’s population by Indigenous status, 2011

Note: 2011 is the most recent year for which there are ERPs by Indigenous status

Source: ABS and Wilson (2014)

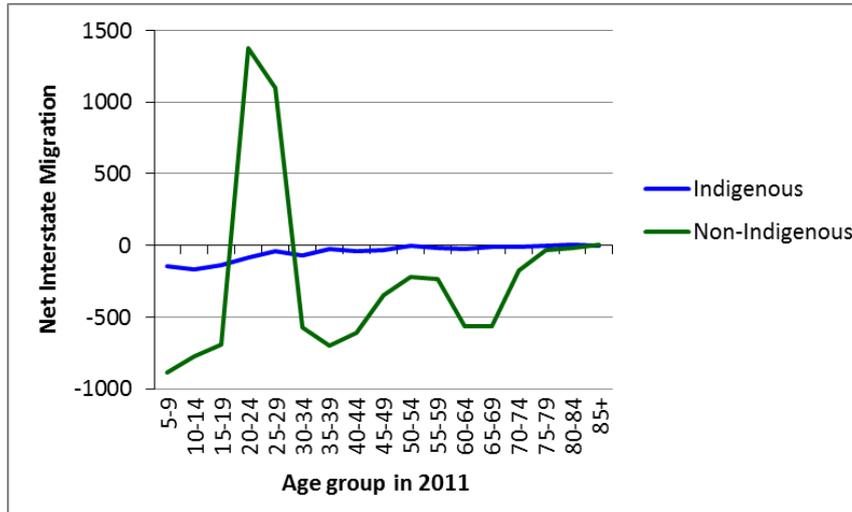


Figure 6: The age pattern of net interstate migration for the Northern Territory by Indigenous status, 2006-11

Source: ABS 2011 Census

Fertility in the Territory has long been slightly above the national average for the non-Indigenous population and noticeably above the national rates for Indigenous women. The Total Fertility Rate (average number of babies per woman) for Indigenous women over the period 2010-14 was 2.25 (ABS 2015), while for non-Indigenous women the equivalent figure was estimated to be 1.98. For the Territory’s population as a whole the Total Fertility Rate for 2010-14 was 2.14 and for Australia overall it was 1.90 (ABS 2015). Unfortunately, some uncertainty about fertility by Indigenous status exists because of uncertainty about

the numbers of births to Indigenous and non-Indigenous mothers, and uncertainty about the size of female Indigenous and non-Indigenous populations which are required to calculate fertility rates (Johnstone 2011).

Life expectancy at birth in the Territory has increased substantially over the last few decades, as Figure 7 demonstrates. Unfortunately the large gap between Indigenous and non-Indigenous life expectancy has not closed over that time. Non-Indigenous life expectancy for females in the Territory is about the same as the national average, while for males it is slightly lower than the equivalent for Australian males.

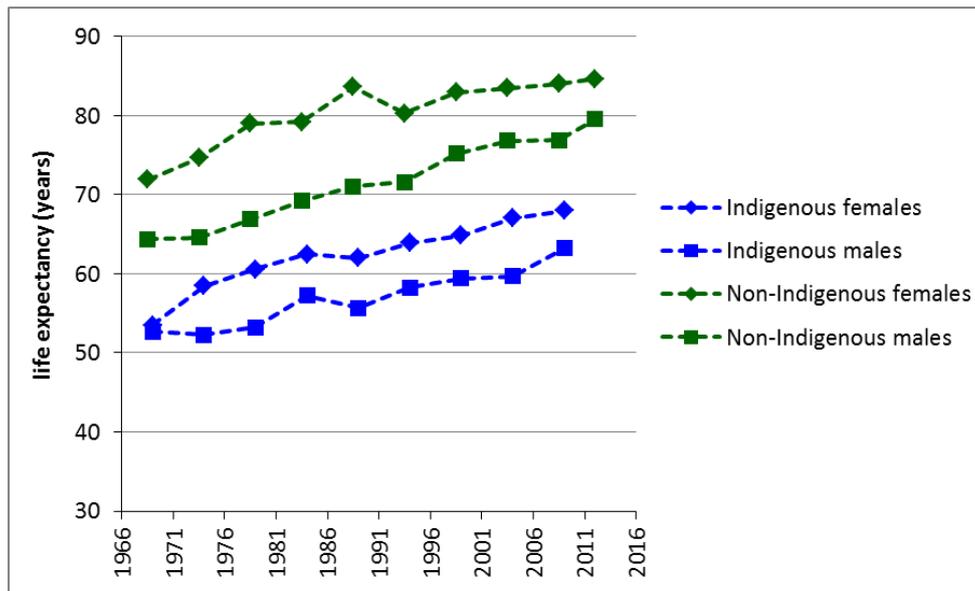


Figure 7: Life expectancy at birth in the Northern Territory by Indigenous status, 1966-2011

Source: Wilson (2014) for Indigenous life expectancy; Chondor et al. (2016) for non-Indigenous life expectancy.

The relevance of the Territory’s past demographic trends for population projections is that most of the characteristics identified above are long-established fundamental features of the Territory’s demography, and will probably remain so in the future. Overall net migration trends are likely to remain volatile and hard to predict because of the cyclical nature of the economy. Net migration of the non-Indigenous population is likely to remain positive in the young adult ages, with net losses occurring to varying degrees at other ages. Fertility rates, which have long been above the national average, are likely to remain so. Life expectancy for both Indigenous and non-Indigenous populations are likely to continue their long-established trends of gradual improvements (Wilson 2014; Terblanche 2016).

3. Projections data and methods

Population projections were created using the author’s Indigenous Status Population Projection program. Technical details of the multistate cohort-component projection model embedded in the program are available in Wilson (2009). The program produces projections of a state or territory’s population by sex and five year age groups in five year intervals by Indigenous status for up to 50 years ahead.

Six different scenarios of the Territory’s demographic future were created for the period 2011-61. The year 2011 was selected as the starting date of the projections because this is the most recent year for which Estimated Resident Populations by Indigenous status are available. Because most of the uncertainty surrounding the Territory’s future is due to migration, the scenarios vary only in their assumed migration futures. Average fertility rates recorded between 2010 and 2014 for the Indigenous and non-Indigenous populations, 2.25 and 1.98 babies per woman respectively, are assumed to apply for the whole projection horizon. Life expectancy for the non-Indigenous population is assumed to follow the trajectory of the Australian population as a whole (though male life expectancy is set fractionally below national male life expectancy). For Indigenous Territorians, life expectancy is assumed to remain 16 years behind that of Australian population as a whole, a gap which has been observed for many decades (Wilson 2014). The scenarios are summarised in Table 1.

Table 1: Six scenarios for the Territory’s demographic future

Scenario	Features
Current Direction	Average demographic settings of the last 5 years continue indefinitely
Very Low	Annual net migration at 10th percentile of distribution of the last 20 years (-2,100) assumed for every future year
Very High	Annual net migration at 90th percentile of distribution of the last 20 years (+3,250) assumed for every future year
Cyclical Migration	The cyclical migration pattern recorded in recent decades continues
Northern Immigration	Large increases in regional migration scheme immigrants, overseas students, and refugees
Exodus	Public service cuts and a moribund private sector economy. Large non-Indigenous net migration losses; increasing Indigenous net migration losses.

The *Current Direction* scenario assumes the average demographic trends recorded over the last 5 years continue indefinitely into the future. Net migration values of the 5 years 2010-11 to 2014-15 are held constant. This assumption comprises net interstate migration losses perfectly offset by net overseas migration gains, giving zero net migration overall. This scenario illustrates the outcome of maintaining the current demographic ‘settings’.

The *Very Low* scenario assumes that the annual net migration value at just 10% from the bottom of the distribution of values recorded over the last 20 years (-2,100) applies from 2016. Although unrealistic, it illustrates a ‘worse case’ scenario of long-run substantial net outward migration from the Territory.

At the opposite end of the spectrum, the *Very High* scenario assumes that the annual net migration value at 90% from the bottom of the distribution of values recorded over the last 20 years (+3,250) applies from

2016. Again the scenario is unlikely, but it represents a ‘best case’ scenario representing very strong and sustained employment growth.

Most population projections incorporate smooth migration trends because it is not possible to forecast the ups and downs of real migration trends. Instead, forecasters attempt to predict long-run averages. However, projections created from such an assumption can give the impression that future population change is likely to be smooth and gradual. As was shown in the previous section, population change in the Northern Territory is almost never smooth and gradual. Therefore a *Cyclical Migration* scenario has been created. It follows the same trajectory as the Current Direction scenario in the very long-run, but it continues the cyclical pattern of historical net migration trends, randomly fluctuating between net migration gains and losses throughout the projection horizon.

In the *Northern Immigration* scenario, a variety of immigration initiatives prove successful, increasing net migration 1,000 per annum above that in the Current Direction scenario from 2016. It is assumed the Territory attracts significantly more state-specific regional migration scheme migrants, more overseas students, and more refugees. In this scenario, the Territory follows the experience of South Australia, which significantly increased its net overseas migration numbers in the late 2000s as a result of policy initiatives (Hugo 2008).

Finally, the *Exodus* scenario presents a future of long-term net outward migration from the Territory. Reduced federal government transfers shrink the size of the public service, with detrimental effects on demand for private sector goods and services. The resource and tourism industries struggle. Net migration is 1,000 per annum lower than in the Current Direction scenario in 2016-21, consisting of large but constant net migration losses for the non-Indigenous population (-3,000 per annum) and gradually increasing net migration losses for the Indigenous population.

4. Population projections

4.1. Total populations

Future growth of the total population of the Territory under the six scenarios is shown in Figure 8. The *Current Direction* scenario takes the population from 231,000 in 2011 to 307,000 by 2036, and then on to 389,000 by 2061. Growth is largely driven by natural increase (births minus deaths) because net interstate migration losses are assumed to be balanced by net overseas migration gains, giving zero net migration gain overall.

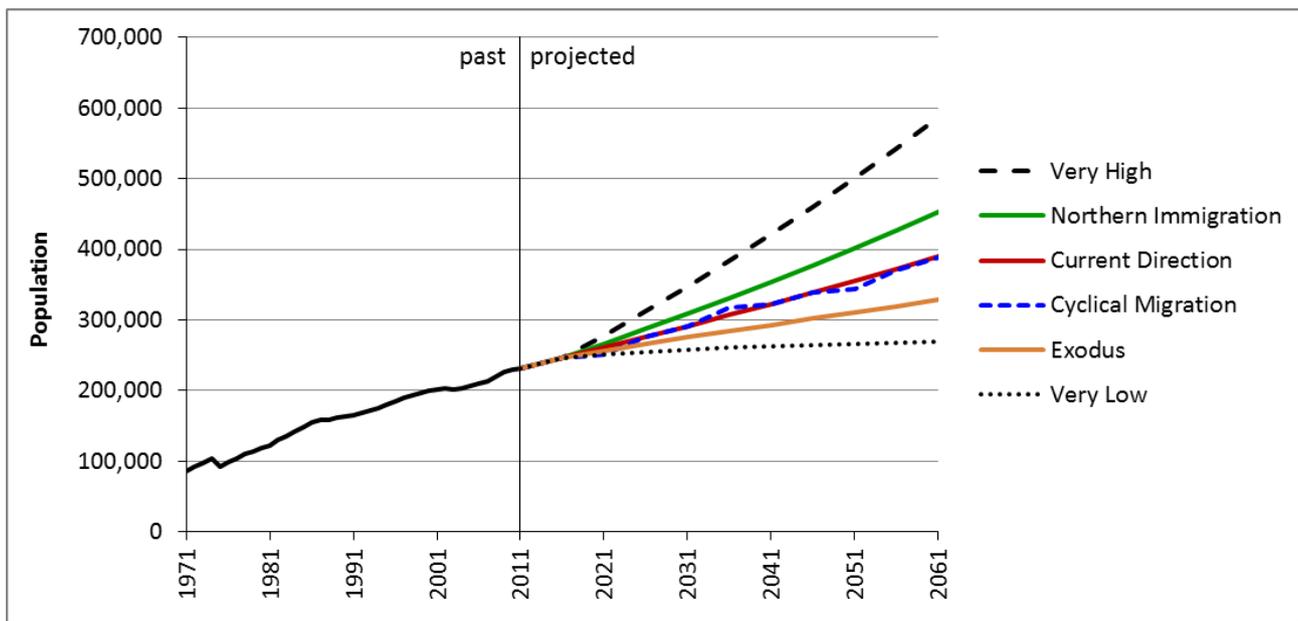


Figure 8: Projections of the Northern Territory’s population under various scenarios, 2011-61

Note: All scenarios give the same results as for 2011-16 because demographic rates for this period are largely known and were assumed to be identical for all scenarios.

The *Northern Immigration* scenario illustrates the outcome of 45 years of high net overseas migration, set at 1,000 more each year than the *Current Direction* scenario from 2016. However, it yields a population in 2061 *more* than 45,000 higher than the *Current Direction* scenario. At 453,000, this total population is 63,000 higher. A ‘multiplier effect’ exists in the form of immigrants generating natural increase.

The *Exodus* scenario illustrates 45 years of net interstate migration at a level 1,000 lower than that of the *Current Direction* scenario each year. It gives a population in 2061 of 329,000, 61,000 lower than the *Current Direction* total. Greater net out-migration reduces the number of adults in the childbearing age groups relative to the *Current Direction* scenario and therefore reduces the number of births in the population.

The *Very High* and *Very Low* scenarios are very unlikely to eventuate, but are based on the past variability of net migration experienced by the Territory. They demonstrate the outcomes of net migration being maintained close to the highest and lowest annual net migration values experienced over the last 20 years. The total population lines traced by the two scenarios can be interpreted as the most likely region in which future population is likely to lie. They cannot be assigned statistical probabilities and remain merely indicative. However, if the past forecast error distribution from Figure 2 is applied to the *Current Direction* scenario, it is possible to calculate what are termed empirical prediction intervals (Rayer et al. 2009). These

intervals are based on the assumption that the magnitude of forecast errors recorded in the past is likely to be repeated in the future. Providing this assumption holds, then the 80% prediction interval by 2036 spans 265,000 to 376,000, suggesting an 80% chance that the future total population of the Territory will lie between those two numbers. By mid-century, the interval spans 270,000 to 495,000. The bounds of these intervals contain populations turn out to be very similar to those in the *Very Low* and *Very High* scenarios. Whether the issue is approached through scenarios or empirical prediction intervals, the conclusion is that the amount of uncertainty about the Territory's future total population is considerable.

The *Cyclical Migration* projection achieves the same final population as the *Current Direction* scenario, though its variable growth is more realistic and consistent with past growth. Similar fluctuating trajectories could have been created around the other scenarios. The key point is to illustrate the likely variable nature of future population growth in a small population like the Territory, whatever the long-run trajectory of the scenario.

4.2. Age structure

The age and sex structure of the Territory's population in 2051 according to the various scenarios is shown in Figure 9 below. In all scenarios the characteristic shape of the population age structure, with a protrusion in the young adult ages, is maintained largely as a result of in- and out-migration age patterns. Except for a few age groups in the *Very Low* scenario, every single age-sex group in every scenario is larger in population by mid-century than in 2011. There are clearly implications from these projections for the demand for goods and services across the life course (as shown earlier in Figure 1).

The largest proportional population increases will occur in the oldest age groups according to all scenarios. This is unsurprising and quite normal: ageing will be experienced by the populations of almost all countries and subnational regions over the coming decades. From just 6% in 2011, the proportion of the Territory's population aged 65 years and above will increase to 12-14% by 2051 in all scenarios. This is still a low proportion compared to Australia as a whole, which is likely to have about 21% aged 65 and over by mid-century. If the scenarios had included alternative mortality futures, the range would have been slightly greater. But there is no doubt the Territory will experience population ageing in coming decades.

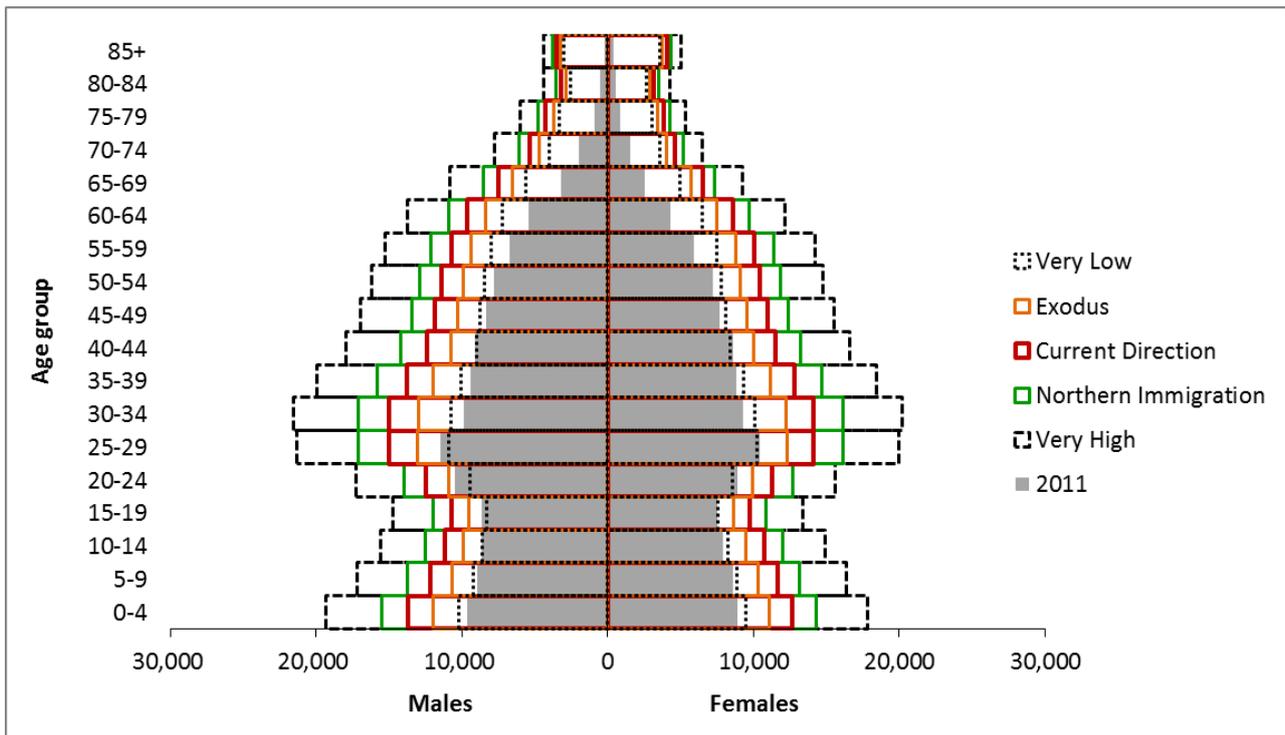


Figure 9: Projections of the Northern Territory’s population age-sex structure in 2051 under various scenarios

Note: The *Cyclical Migration* scenario is excluded as it is very similar to the *Current Direction* scenario

4.3. Indigenous and non-Indigenous populations

Both Indigenous and non-Indigenous populations are projected to increase in the *Current Direction* scenario. The Indigenous population increases from 69,000 in 2011 to 111,000 by 2061, while the non-Indigenous population increases from 162,000 to 278,000. All scenarios suggest long-run population increases except for the non-Indigenous population under the *Very Low* scenario where the 2061 population total is about the same as it was in 2011.

Figure 10 presents projections of the Territory’s population by Indigenous status in the form of the percentage of the population projected to be Indigenous. This has implications for the distribution of services in the Territory between those that are specifically designed to for Indigenous peoples and those that are more general. The *Current Direction* scenario projects a very slight decrease from the recent figure of 30%. Under the higher net migration scenarios of *Northern Immigration* and *Very High*, much of the net migration gain will be non-Indigenous, and therefore the Indigenous percentage of the population will fall. Similarly, under the net migration loss scenarios of *Exodus* and *Very Low* much of the net migration loss is non-Indigenous, and the Indigenous share of the population will rise. These results demonstrate the difficulty of knowing whether the Indigenous share of the Territory’s population will increase or decrease in the future.

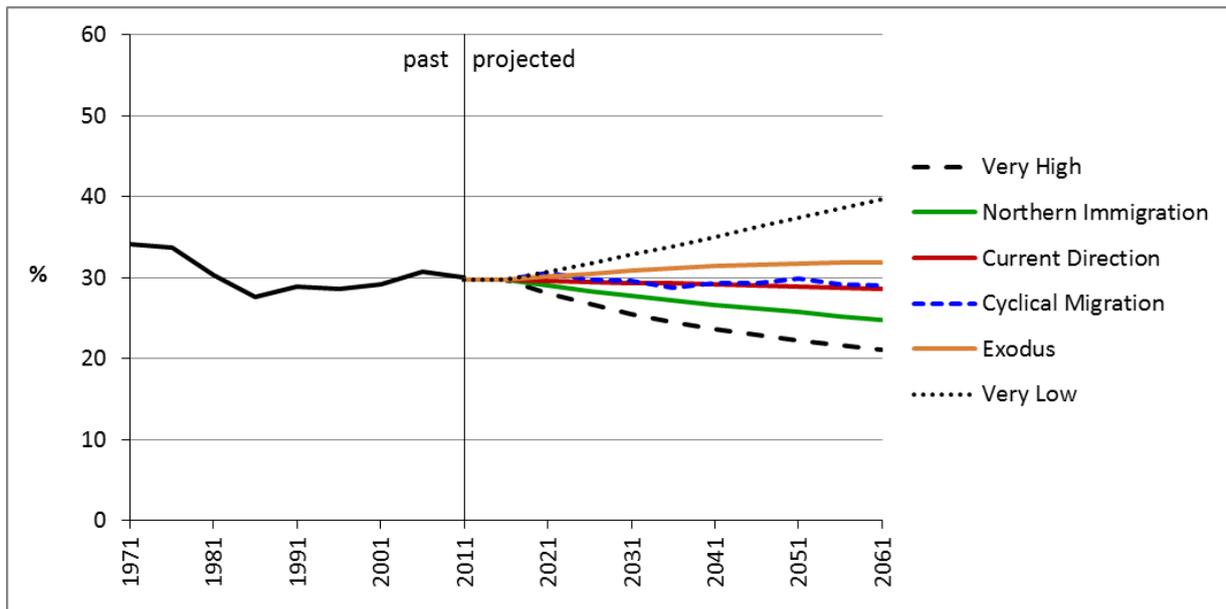


Figure 10: The Indigenous share of the Northern Territory’s population under various scenarios, 2011-61

However, there is much more certainty about the future of the Territory’s share of the national Indigenous population. Taylor and Bell (2013) have documented how this share has fallen in recent decades, from about 18% in 1981 to just above 10% in 2011. All projection scenarios have the percentage continuing to fall in coming decades, with all scenarios projecting just 5-6% by 2051. The faster projected growth of Australia’s Indigenous population outside the Territory is due to much higher rates of Indigenous/non-Indigenous partnering (with about 90% of children born to such couples are reported as Indigenous), and greater rates of people newly identifying as Indigenous in the census (Wilson 2016).

5. Discussion and conclusions

This paper has presented six scenarios for the future of the Territory's population. The *Current Direction* scenario reveals how the Territory's population would change if recently recorded demographic parameters were to remain unchanged; the *Northern Immigration* demonstrates the outcomes of higher immigration intakes; and the *Exodus* scenario shows a more pessimistic outcome with much more net outward migration from the Territory. The *Very Low* and *Very High* scenarios are based on net migration numbers towards the bottom and top of the distribution of net migration levels observed over the last 20 years. They provide a close approximation of 80% prediction intervals created from the distribution of past forecast errors for the Territory. The future of the Territory's population total is highly uncertain.

But not all aspects of the Territory's future demography are so uncertain, as the projection results in the previous section showed. Table 2 summarises selected aspects of the future population which are regarded as very likely, likely, about as likely as not, or unlikely. These labels are recommended by the Intergovernmental Panel on Climate Change for communicating the likelihood of climate change projections to the public (IPCC 2010). They provide a non-technical description of probabilities, and permit different future demographic outcomes to be ranked on a simple qualitative scale.

All studies contain their limitations. One obvious shortcoming is the lack of variation between scenarios in fertility and mortality rates. Mortality rates can be predicted reasonably well; fertility is less predictable but since the 1970s it has varied within a fairly small range. The vast majority of uncertainty, especially for the Northern Territory, lies in its migration trends. However, this applies more to the non-Indigenous population than it does for the Indigenous population. The statistical disadvantage experienced by the Indigenous population means that past demographic rates are less reliable and demographic processes are not so well understood. There is probably more uncertainty surrounding the future of Indigenous fertility and mortality than this study incorporates. Nonetheless much of the uncertainty affecting the Northern Territory's future population is due to the non-Indigenous population because it experiences such high and volatile migration rates.

A second limitation is the assumption of fixed age patterns of in- and out-migration rates in the projections (although the overall *levels* of in- and out-migration vary considerably, and age patterns of *net* migration also vary). Generally, research has shown that the shapes of regional migration rate age profiles shift only slightly and gradually over time (Bell et al. 2017), and the use of fixed profiles is generally considered to be reasonable and commonly applied in population projections. But in the long-run, they are likely to shift to some extent. A key question for the Territory's demography is the extent to which its migration age profiles may change in the future as its economic and social composition evolves.

Table 2: Selected aspects of the Territory’s future population that are known with varying degrees of certainty at selected years in the future

Likelihood	2021	2031	2051
Very likely (90-100% probability)	Total population will lie within the range 250,000-280,000. The population will be older than in 2011. The NT’s share of the national Indigenous population will be lower than in 2011.	Total population will lie within the range 260,000-350,000. The population will be older than in 2021. The NT’s share of the national Indigenous population will be lower than in 2021.	Total population will lie within the range 270,000-500,000. The population will be older than in 2031. The NT’s share of the national Indigenous population will be lower than in 2031.
Likely (66-90% probability)	There will be more births than in 2011.	There will be more births than in 2021.	There will be more births than in 2031.
About as likely as not (33-66% probability)	Overall net migration will be positive.	The share of the NT’s population identifying as Indigenous will be lower than in 2011.	The share of the NT’s population identifying as Indigenous will be lower than in 2011.
Unlikely (0-33% probability)	Total population will be lower than in 2011.	Total population will be lower than in 2021.	The working age population will be smaller than in 2011.

Finally, what do the findings in this paper mean for population forecasting for the Northern Territory? What do they mean for planning? For population forecasting, they show that only short-term forecasts of total and age-specific populations of up to 10 years ahead are likely to be reliable (Figures 2, 8 and 9). Other future demographic characteristics, such as population ageing, are known with greater certainty, at least in general terms, quite far into the future (Table 2).

For total and age-specific population forecasts beyond a decade into the future, scenarios and empirical prediction intervals can be calculated. Alternative scenarios can provide answers to questions such as ‘If net migration were to shift to X amount per year, what would be the outcome?’ Other scenarios could describe a desired future and be considered as a policy option. Empirical prediction intervals provide clues about the likely range of demographic futures. In the future it may be possible to create probabilistic population forecasts, once the methodology has been developed to adapt the current generation of probabilistic models for large populations with extensive and detailed historical data to smaller populations with less data.

Planning in the Territory can rely on population forecasts in the short-term (up to 10 years). For the longer term, flexibility will be necessary. This might involve, for example, purchasing or reserving land which could be used for a new school when necessary, but in the interim either using it for purposes which are suitable for portable buildings, or constructing buildings which are suitable for multiple uses (e.g. those which could accommodate a school, community centre, library, theatre, or health clinic). A shift from the traditional

planning approach is required, away from thinking about a single population projection figure to a range of possible population futures.

The demographic future of the Territory over the next few years can be described with a reasonable degree of confidence, but the predictability of its demographic characteristics several decades out remains very limited. The long-run future demography of the Territory will be shaped by many factors – including global and national economic forces, environmental influences, local communities, and the policies of many governments – which are largely unpredictable so far in advance.

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