

POPULATION STUDIES RESEARCH BRIEF

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POPULATION EXCHANGE BETWEEN DARWIN AND THE REST OF THE NORTHERN TERRITORY 2001-2006

KEY FINDINGS

- Over 5% of Northern Territory residents migrated from one part of the Territory to another between 2001 and 2006;
- Darwin received the largest number of internal migrants (3226 people), but was also the source of the highest number of out-migrants (1714 people);
- All regions lost population to Darwin with the exception of East Arnhem, which lost Indigenous population but gained non-Indigenous population;
- There were few differences between the intra-Territory migration rates of Indigenous and non-Indigenous people, however;
- Indigenous people were twice as likely to move into Darwin as to move out. Non-Indigenous people were also more likely to move into Darwin, but less dramatically so;
- The research reveals a challenge for population policy in the Northern Territory - sustaining population growth outside of Darwin is made even more difficult by the tendency of all populations to 'drift' towards the capital.

RESEARCH AIM

- To model rural-to-urban migration within the Northern Territory

This research brief draws on data from the 2006 Census of Population and Housing provided by the Australian Bureau of Statistics. The study is part of a program of demographic research funded in part by the Northern Territory Treasury and the Australian Research Council. The research has been conducted by Associate Professor Dean Carson, Andrew Taylor and Dr Teresa Cunningham.



Background

Monitoring rural-to-urban migration is of concern in the Northern Territory for a number of reasons. Sustaining viable populations across the Territory is a substantial challenge for government, and the challenge is even greater in rural and remote areas. In the Northern Territory, this means everywhere outside of Darwin and its immediate surrounds (population just over 100 000). The next largest population centre is Alice Springs with a population of around 25 000 people. No other centre exceeds 10 000 people. The provision of services and the sustenance of livelihoods in the remote and sparsely populated regions relies on detailed knowledge of how many people live there and how long they stay as well as their demographic (age/sex/ Indigenous) structure. There is specific concern about the movement of Indigenous people from remote areas into the more urban areas, and what this means for service provision and social cohesion.

The well known difficulties measuring migration into and out of the Northern Territory are exacerbated when examining intra-Territory mobility. There is no universal, ongoing data set which confidently identifies people in their location of residence at all times. There are a number of partially useful datasets which are updated periodically and contain some location information. They include data collected by health, education, taxation and other government departments. In the main, the accuracy and currency of these datasets are determined by individual's compliance with requirements to notify change of address. The incentives to comply decrease as migration distance and intended length of stay in a location decrease.

The primary source of universal statistics therefore continues to be the Census of Population and Housing (last held in August, 2006). Every person enumerated in the Census must identify the location of their current residence, and are also asked to identify their location of residence one year and five years previous. There are issues with people self-determining their place of residence, and with not answering the questions about where they used to live. While more work needs to be done to improve the quality and availability of data that can comment on migration patterns, the Census remains the best source of insights.

In this brief, we analyse 2006 Census data to see what patterns of intra-Territory migration they reveal, and particularly the relationship between Darwin and other locations. We are also concerned with any observable differences in patterns between Indigenous and non-Indigenous people.

Methods

The research is based on a table of data from the 2006 Census which includes age (5 year groups), sex, Indigenous status, place of usual residence on Census night and place of usual residence five years ago. Place of usual residence was coded to six broad regions – Greater Darwin, Darwin rural area, East Arnhem, Katherine, Barkly, and Central – to ensure sufficient numbers for detailed analysis. Usual residence five years ago was selected as the migration variable because it tends to capture nearly twice as many migration events as usual residence one year ago. Data was only available for persons aged five years and over (younger persons did not have a usual residence five years ago).

Results

There were 177 302 persons aged five years or older residing in the Northern Territory at the time of the 2006 Census. Nearly 90% of these (156 196) provided information about their place of usual residence five years ago. That a substantial number of people (over 20 000) did not provide this information is an issue for the research. Data was missing for a slightly higher percentage of Indigenous people (13%) than non-Indigenous people (10%). The population of concern for this research was those people who were resident in the Northern Territory at both points of time – Census night 2006, and the same date in 2001. There were 117 833 people in this ‘stable population’. This comprised of 40 588 Indigenous people, 76 172 non-Indigenous people, and 1073 people whose Indigenous status was unknown.

There were 6289 people (5.3% of the stable population) who had moved from one region in the NT to another between 2001 and 2006. This included 1 732 Indigenous people (4.3% of the stable Indigenous population) and 4 495 non-Indigenous people (5.9% of the stable non-Indigenous population). Greater Darwin received the largest number of in-migrants (3 226 people or 51.3% of all movers). Central Australia was the next most attractive region (825 people or 13.1% of movers), followed by Darwin rural area (12.6%), Katherine (10.3%), East Arnhem (8.8%) and finally Barkly (4.0%). The situation was quite different in terms of generating regions. Greater Darwin still generated the highest number of movers to other regions (1 714 or 27.3% of movers), but this was much lower than its proportion received. Katherine was the next largest source of out-migrants (1 248 people or 19.8% of movers), followed by Central Australia (18.5%), Darwin rural area (17.7%), East Arnhem (8.5%) and finally Barkly (8.1%). Only Greater Darwin and East Arnhem gained population from intra-Territory migration. Greater Darwin received 1 512 more in-migrants than it generated out-migrants, and East Arnhem received 15 more in-migrants than it generated out-migrants. Katherine generated 600 more out-migrants than it received in-migrants. Central Australia generated 341 more out-migrants, Darwin rural area generated 325 more out-migrants and Barkly generated 261 more out-migrants. Table 1 summarises these patterns, and expresses the rates of movement in and out of the regions as a proportion of their ‘stable population’.

Table One: Intra-Territory Mobility – in-migrants and out-migrants for regions 2001-2006.

Region	Number and percent in-migrants from other regions	Number and percent out-migrants to other regions	Net population change
Greater Darwin	3 226 (5.1%)	1 714 (2.7%)	1 512 (2.4%)
Darwin Rural Area	790 (8.0%)	1 115 (11.3%)	- 325 (-3.3%)
East Arnhem	551 (5.8%)	536 (5.7%)	15 (0.1%)
Katherine	648 (6.5%)	1 248 (12.5%)	- 600 (-6.0%)
Barkly	249 (7.3%)	510 (15.0%)	- 261 (-7.7%)
Central Australia	825 (3.7%)	1 166 (5.2%)	- 341 (-1.5%)

The larger population regions of Darwin and Central Australia (which includes Alice Springs) felt the smallest proportional impacts from intra-Territory migration. On the other hand, out-migration from the more sparsely populated regions of Darwin Rural

Area, Katherine and Barkly (including Tennant Creek) exceeded ten percent of the size of their stable populations.

The patterns observed in Table 1 were consistent for Indigenous and non-Indigenous populations except that East Arnhem was a net generating region for Indigenous people (45 more people moved out than moved in), and a net receiving region for non-Indigenous people (57 more people moved in than moved out). Greater Darwin was the most popular destination for out-migrants from all regions. Greater Darwin was the destination for 82.8% of movers out of Darwin Rural Area, 74.4% from East Arnhem, 73.4% from Central Australia, 69.2% from Katherine and 36.3% from Barkly. Only Barkly had another substantial destination, with 34.7% of out-migrants moving to Central Australia. The situation was similar for Indigenous migrants except for the Barkly region. Greater Darwin received just 25.1% of Indigenous Barkly out-migrants, which was less than both Central Australia (43.3%) and Katherine (28.3%).

Greater Darwin received just over half of all intra-Territory migrants identified in the data. This was true for both Indigenous and non-Indigenous intra-Territory migrants. Greater Darwin generated slightly less than half the number of out-migrants as it received in-migrants. There were two and half times as many Indigenous in-migrants to Greater Darwin as there were out-migrants. In other words, for every ten Indigenous in-migrants to Greater Darwin, there were four out-migrants. The situation was different for non-Indigenous migrants, with six out-migrants for every ten in-migrants. This is some evidence of a greater 'drift' towards Darwin by Indigenous people when compared with non-Indigenous people.

It is possible to compare the profiles of Indigenous and non-indigenous intra-Territory migrants in to Greater Darwin, but this can only be done at a broad level, as numbers get very small when trying to identify too many sub-classes of people. For the total population, males and females were equally likely to have moved between regions (about 5.3% of the stable population). A slightly higher percentage of female movers (52.6%) compared with males (50.0%) had moved into Greater Darwin. However, younger people (aged under 40 years) were more likely to have moved than older people (6.0% compared with 4.4%). Younger people were also more likely to have moved into Greater Darwin (52.4% of movers compared with 49.2%).

Non-Indigenous people were much more likely than Indigenous people to have moved between regions (5.9% compared with 4.3%). They were only slightly more likely to have moved into Greater Darwin (51.7% of non-Indigenous movers and 50.7% of Indigenous movers). There were slightly more Indigenous female movers (490 or 4.3% of the stable population) than Indigenous male movers (387 or 4.2%), and Indigenous females were more likely to have moved into Greater Darwin (54.0% of movers) than Indigenous males (47.0%). The differences observed in age structure of movers for the total population were not replicated for Indigenous people. This may be because of the small number of Indigenous people aged over forty years (about one quarter of the population, compared with over forty percent of the non-Indigenous population).

Comments

The Northern Territory experiences very high rates of interstate migration, with the net result being a loss of population to other states and territories recorded in the 2006 Census. The key policy questions around intra-territory migration include the extent to which regions are able to retain that proportion of the population that does choose to stay in the Northern Territory. Discourse has focused mainly on the exchange of population between the more rural/ remote regions and the more urban ones. There is concern that some rural and regional areas may be losing substantial populations to more urban ones, and that these populations may have specific demographic characteristics.

This research brief has been able to provide some preliminary analysis using Greater Darwin as an example of an urban region. There was certainly evidence from the 2006 Census that where intra-Territory migration occurs, it largely involves people moving to Greater Darwin from all other regions. There were some exceptions to this rule –

- East Arnhem has attracted some non-Indigenous population, possibly linked to the growth of the mining industries there;
- Indigenous migration patterns from the Barkly region follow the classic rural-to-urban migration models – moves over relatively short distances to larger population centres (Katherine and Alice Springs). Those same models would predict that the next moves would be to larger population centres. In the Northern Territory, this would mean Darwin, but could also result in interstate migration if people continue to go south through Alice Springs and then perhaps on to Adelaide or other southern State capitals.

The differences in destinations selected were perhaps the most notable differences between Indigenous and non-Indigenous migrants. The other key difference was in the rate of exchange of population between Darwin and other regions. The Indigenous migration pattern was weighted more heavily towards net population gain for Darwin. The data was not sensitive enough to show whether this was the case for other examples of rural/ urban exchange (particularly involving Alice Springs), but this is a question that will be addressed as the research continues.

The Census data could not be used to draw the conclusion that rural-to-urban migration involving Darwin is a more common feature of Indigenous people, or of young and male Indigenous people. The rural-to-urban (Darwin) migration pattern exists across the whole population, with only small differences between various groups. There was some evidence, however, that male Indigenous people are more likely than other groups to move from some rural regions (particularly Barkly) to Alice Springs. This again emphasises the need for an additional study focussed on Alice Springs.

It could be that data about other forms of migration (short term, seasonal, cyclical) and data from those who did not answer the Census questions reveal different patterns of rural-to-urban migration in the Northern Territory. Accessing such data is a high priority task for the ongoing program of research.