

# POPULATION STUDIES RESEARCH BRIEF

ISSUE Number 2010055

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Population and Tourism Studies  
Group  
School for Social and Policy Research  
Charles Darwin University  
Northern Territory 0909  
catherine.martel@cdu.edu.au

## Spatial patterns of older people migrating to and from the Northern Territory

### KEY FINDINGS

- Overall a larger number of people aged 55 years and over leave the Territory than arrive.
- The largest number of leavers (close to half) moved to Queensland.
- In proportion to the size of the population in each NT region, the Darwin area, and Darwin City in particular, received the most arrivers.
- The Litchfield Shire received a large number of arrivers, but out-migration was even higher.
- Alice Springs suffered a greater percentage loss of older people through migration than the Darwin area or Remote NT regions.
- The proportion of older people who moved to remote NT locations was very low in comparison to urban locations and even more so if Katherine and Nhulunbuy are excluded from the remote count.
- People aged 75 years and over were a small minority of older arrivers in all areas. However, net migration was positive for this age group in all urban areas, but negative in remote areas.

**RESEARCH AIM**  
To look at the spatial  
patterns of older  
migrants in and out of  
the Northern Territory.

This research brief discusses the movements of older people who have come to or left the Northern Territory between 2001 and 2006. We examine where arrivers have come from and moved to in the NT, and where leavers have departed from and gone to, to identify what areas older people are or are not attracted to. This research brief draws on data from the 2006 Census provided by the Australian Bureau of Statistics.

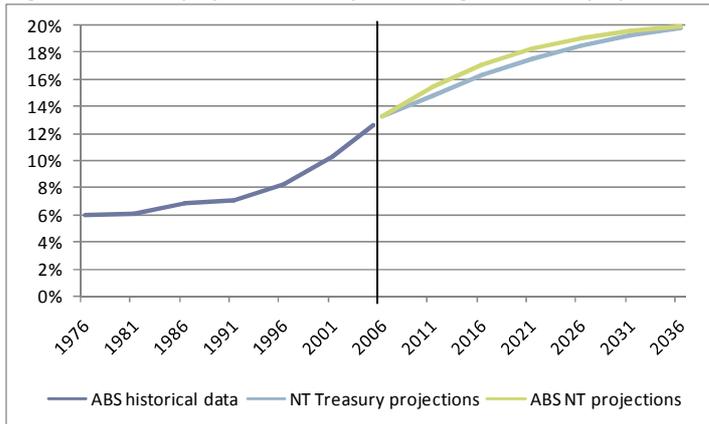
Prepared by **Catherine  
Martel**

Spatial patterns of in- and out-migration of older people in the Northern Territory.

**Older people in the Territory – history and projections**

The Northern Territory has historically had few older people compared to the rest of Australia. Of recent times, and particularly since the mid-1990s, there has been a marked increase in the percentage of people aged 55 years and over and, even though it is expected to remain at least 10% under the percentage of older people in Australia overall, the increase is projected to continue over the next 30 years albeit at a slightly reduced rate from 2020 onwards (Figure 1). By 2036, people aged 55 years and over are expected to represent 19.8% of the NT’s population.

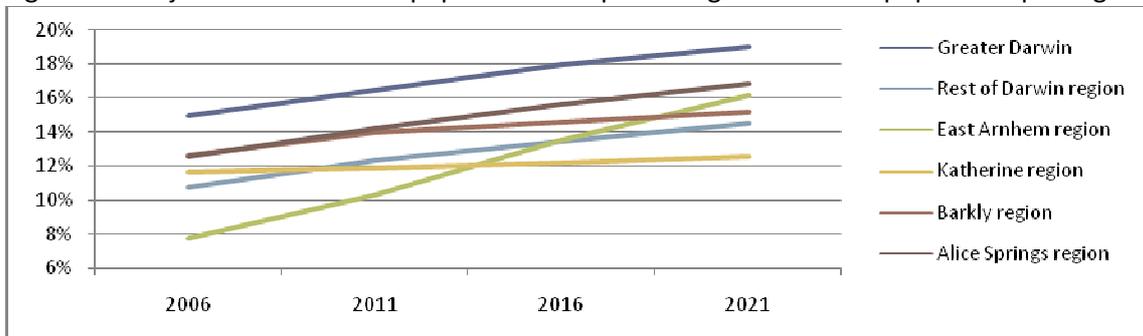
Figure 1 – 55+ population as percentage of total population, NT 1976-2036



Sources – ABS Australian Historical Population Statistics, 2008; Northern Territory Treasury Population Projections, 2009; ABS Population Projections Series B, Northern Territory, 2006 to 2101.

In line with current age distributions in the regions, it is expected that the impact of ageing will be felt differently across the Territory. The proportion of older people (55+ years) in the population ranged from 7.7% in the East Arnhem Region to 15.0% in the Greater Darwin area in 2006. By 2021 the lowest proportion of seniors is expected to be in the Katherine Region at 12.5% and the highest in Darwin at 19.0%. While ageing is not exclusively an urban phenomenon, the Greater Darwin Region is expected to remain the area with the highest percentage of older people throughout the period. The biggest proportional change on the other hand is projected for the East Arnhem region where it is expected that, by 2021, 16.2% of the population will be aged 55+ years, up from 7.7% in 2006 (Figure 2).

Figure 2 – Projections for the 55+ population as a percentage of the total population per region



Source: Northern Territory Treasury, NTG Projections Scenario.



Spatial patterns of in- and out-migration of older people in the Northern Territory.

**Method**

In a region that has had relatively small older populations thus far, the issue of ageing is important to governments and town planners who need to plan the provision of infrastructure and services well in advance. As part of this planning, the study of the spatial patterns of in and out-migration of older people can be a useful tool to determine what factors may influence their decision to come or go and to identify where amenities are going to be needed the most.

The 2006 Census provided data on what respondents considered their usual place of residence on Census night and what they considered their usual place of residence 5 years before. Based on this we defined NT in-migrants, or arrivers, as those whose usual place of residence in 2001 was outside the Territory (including overseas) and whose usual place of residence in 2006 was the Northern Territory. Leavers were people who lived in the NT in 2001 but whose usual place of residence at the 2006 Census was outside the Territory. These groups were profiled according to the geographical locations from which arrivers came and in which they chose to reside, and the locations leavers departed from and went to.

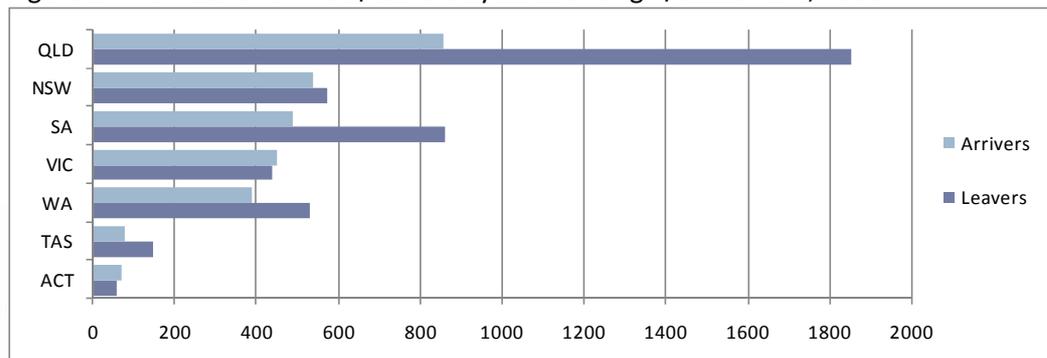
Other data used for commentary were results from the Northern Territory Population Projections Model (as outlined in Northern Territory Treasury, 2009). One of the limitations of this brief is that it fails to account for multiple movements to and from the Territory within the five years between the two censuses, nor does it provide data on the number of returning residents to the Territory. Additionally, the census doesn't provide data on people who have left the Territory to move overseas. As a result, out-migration figures only take into account interstate migration and the migration ratios presented in this brief are likely to be under-representations of actual figures.

**Spatial characteristics of in and out-migration**

***Interstate migration***

Between 2001 and 2006, 3,241 people aged 55 years and over arrived to the Northern Territory from other states and overseas, and 4,457 people aged 55 years and over departed the Territory to settle interstate. The Territory lost people aged 55 years and over to all states except Victoria and the ACT, but even there, the surplus was only marginal. Queensland registered the highest number of both arrivers and leavers. More significantly, 41.6% of all leavers moved to Queensland, resulting in the largest migration deficit from the Territory in this age group (Figure 3). The number of older people who moved to the Territory from overseas was 377, comparable to the number of arrivers from Western Australia.

Figure 3 – Number of arrivers/leavers by state of origin/settlement, 2006.



Source: ABS Census of Population and Housing, 2006.

Spatial patterns of in- and out-migration of older people in the Northern Territory.

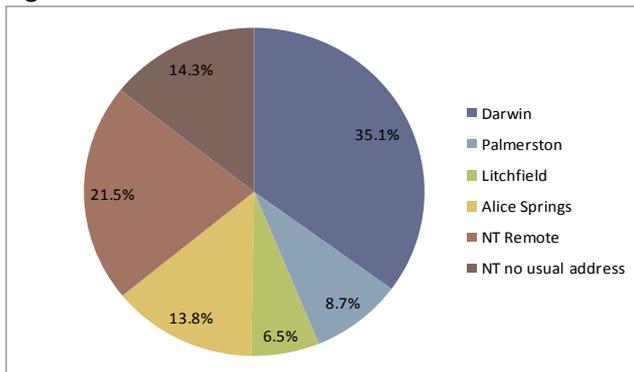
**Distribution of arrivers**

*Northern Territory Regions*

Geographical distribution

A majority (64.1%) of older arrivers settled in urban parts of the Territory (Darwin, Palmerston, Litchfield Shire, and Alice Springs) rather than remote areas (21.5%). We need to point out however our inability to comment on a relatively large proportion (14.3%) of arrivers who were recorded in the Census under “NT no usual address” in terms of their 2006 residence (Figure 4).

Figure 4 – Distribution of older arrivers in the Territory, 2006.



Source: ABS Census of Population and Housing, 2006

In total, the greater Darwin area accounted for just over half (50.3%) of all older arrivers. These mostly settled in Darwin, while Palmerston, on the other hand, attracted a relatively small portion of arrivers (8.7%) and 13.6% of all urban settlers, substantially less than Alice Springs (13.8% of all arrivers and 21.5% of the urban settlers).

Of all the Statistical Local Areas (SLA) classified as Remote (49 in total), close to a third of the arrivers (30.9%) were concentrated in two SLAs only, with respectively 12.6% of all Remote area arrivers recorded in Nhulunbuy and 18.3% in Katherine. On the other hand, numbers of arrivers were very low in SLAs with mostly Indigenous populations.

Age distribution

The young olds (55-64) comprised the majority of both arrivers and leavers in all regions and were over-represented in the arrivers and leavers cohorts compared to their share of the total 55+ population per region (Table 1). This was particularly striking in Remote areas where people aged 55 to 64 amounted to 81.8% of arrivers and 76.7% of leavers aged 55 years and over whereas they only amounted to 64.7% of the 55+ population at the 2006 Census. On the other hand, the old olds (75+) were very much under-represented amongst leavers and even more so amongst arrivers in NT Remote areas compared to their share of the total population aged 55 years and over (2.1% of arrivers and 3.9% of leavers aged 55 years and over were in the 75+ age group as opposed to 10.1% of all people aged 55 years and over in NT Remote areas).

Table 1 – Arrivers and leavers per age group per region compared with 2006 population.

	Arrivers			Leavers			2006 population		
	Greater Darwin	Alice Springs	NT Remote	Greater Darwin	Alice Springs	NT Remote	Greater Darwin	Alice Springs	NT Remote
<b>55-64</b>	72.6%	73.6%	81.8%	71.5%	72.7%	76.7%	64.4%	63.8%	64.7%
<b>65-74</b>	17.2%	14.3%	16.0%	22.9%	21.9%	19.4%	24.0%	22.3%	25.1%
<b>75+</b>	10.1%	12.1%	2.1%	5.6%	5.4%	3.9%	11.6%	14.0%	10.1%
<b>55+</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

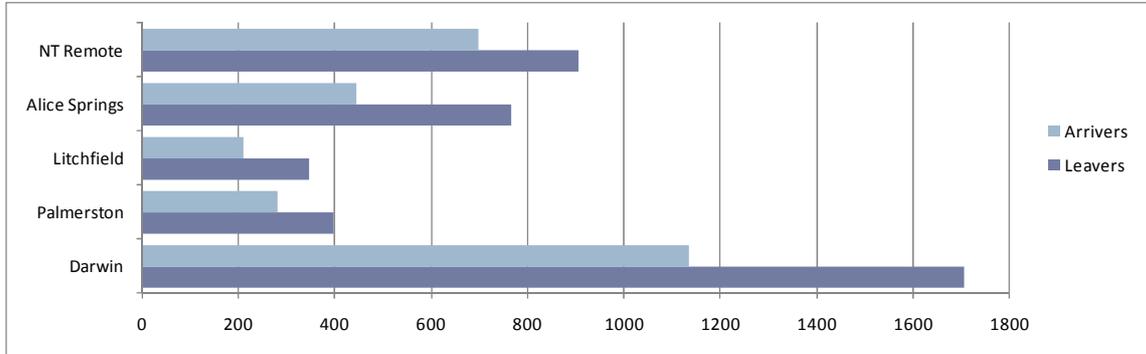
Source: ABS Census of Population and Housing, 2006

Spatial patterns of in- and out-migration of older people in the Northern Territory.

Net migration

Both urban and remote NT registered a net migration deficit for the period 2001 to 2006. Though Darwin city attracted the majority of new arrivers, it is also recorded the largest number of leavers and the largest migration deficit in absolute numbers (Figure 5).

Figure 5 – Number of arrivers/leavers per region of origin/settlement, 2006.



Source: ABS Census of Population and Housing, 2006

Looking more closely at net migration (Table 2), we notice that Alice Springs had the lowest ratio of arrivers to leavers. The breakdown between the age groups illustrates that all urban areas shared a lower ratio of arrivers to leavers in the 65 to 74 age group compared to the 55-64 age group and positive migration balance amongst the 75 years and older. NT Remote regions on the other hand exhibited much lower migration ratios for the old olds than the other groups.

Table 2 – Migration ratio (arrivers/leavers\*100) by region, 2006.

	Darwin	Palmerston	Litchfield Shire	Total Greater Darwin	Alice Springs	NT Remote
55-64	67	68	70	68	59	82
65-74	52	63	34	50	38	64
75+	117	124	133	120	132	43
55+	67	71	61	67	58	77

Source: ABS Census of Population and Housing, 2006

As commentary to the NT Treasury projections, we might add that the migration ratio for people aged 55 years and over in the East Arnhem region was 51 for the 2001-2006 period, which amounts to almost double the amount of people in this age group leaving the area to the number of people arriving (271 to 139). This is mostly due to age specific migration patterns in Nhulunbuy. Indeed, the arrivers/leavers ratio for Nhulunbuy was 46 which seems to indicate that people do not age in place.

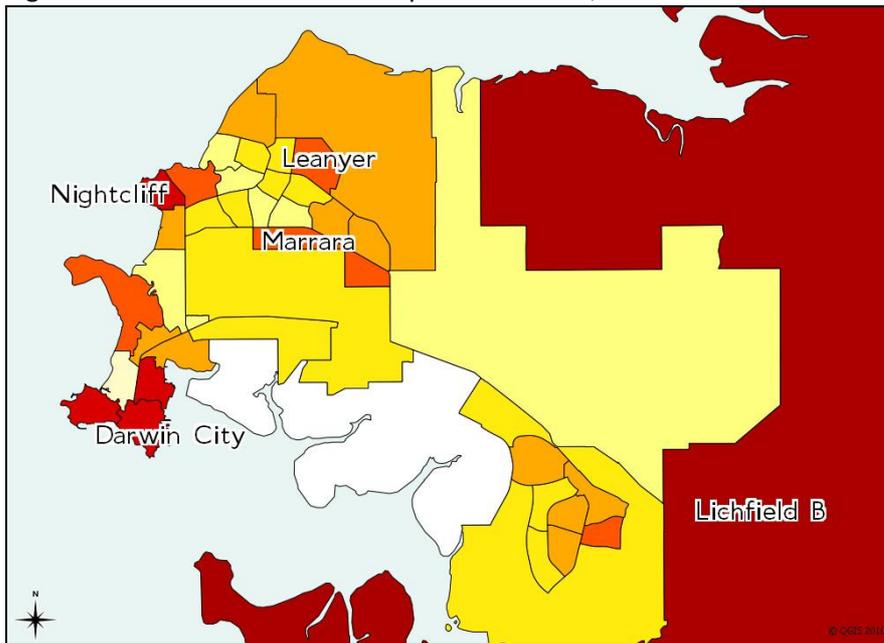
*The Greater Darwin region*

Geographical distribution

Within the ‘urban settlers’ a majority settled in the Greater Darwin region (78.8% of all urban settlers) and in particular in Darwin (54.9%). Figure 6 represents the distribution of arrivers in each Statistical Local Area (SLA) as a percentage of all arrivers in the Darwin region aged 55 years and over. Low proportions are represented in light yellow while high proportions are represented in darker tones. The city, Nightcliff and rural areas (Litchfield B) attracted particularly high numbers of arrivers. In comparison, except for Leanyer and Marrara, the Northern suburbs attracted a relatively low number of people.

Spatial patterns of in- and out-migration of older people in the Northern Territory.

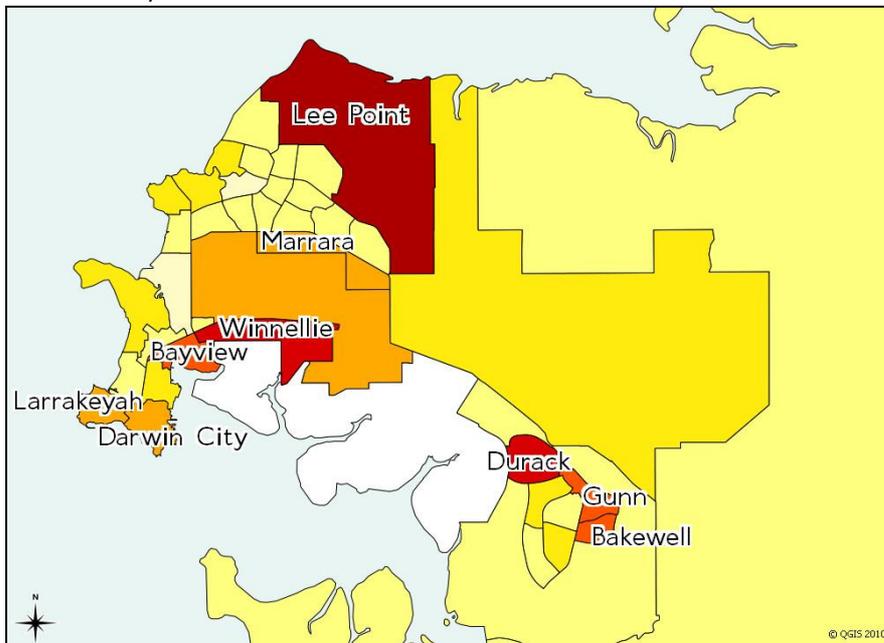
Figure 6 – Distribution of arrivers per Darwin SLA, 2006.



Source: ABS Census of Population and Housing, 2006

Given varying population densities in the different SLAs, we also examined the proportion of arrivers as a percentage of the total population aged 55 years and over at the 2006 Census (Figure 7). The city still appeared to be a relatively attractive area to older arrivers but this was less the case for the rural areas where the proportion of arrivers compared to the total older population was actually quite low.

Figure 7 – Arrivers as percentage of total population 55+ per SLA (from 0-5% in light yellow to >50% in red).



Source: ABS Census of Population and Housing, 2006

Generally, if we take a closer look at the composition of the older population in each suburb, people who arrived in the 5 years preceding the census amounted to 18.4% of all people 55 years and over in the Inner City, 17.0% in Larrakeyah and 20.9% in Bayview-Woolner, a much greater proportion than in the Northern suburbs where, overall, 6.9% of people aged 55 years

Spatial patterns of in- and out-migration of older people in the Northern Territory.

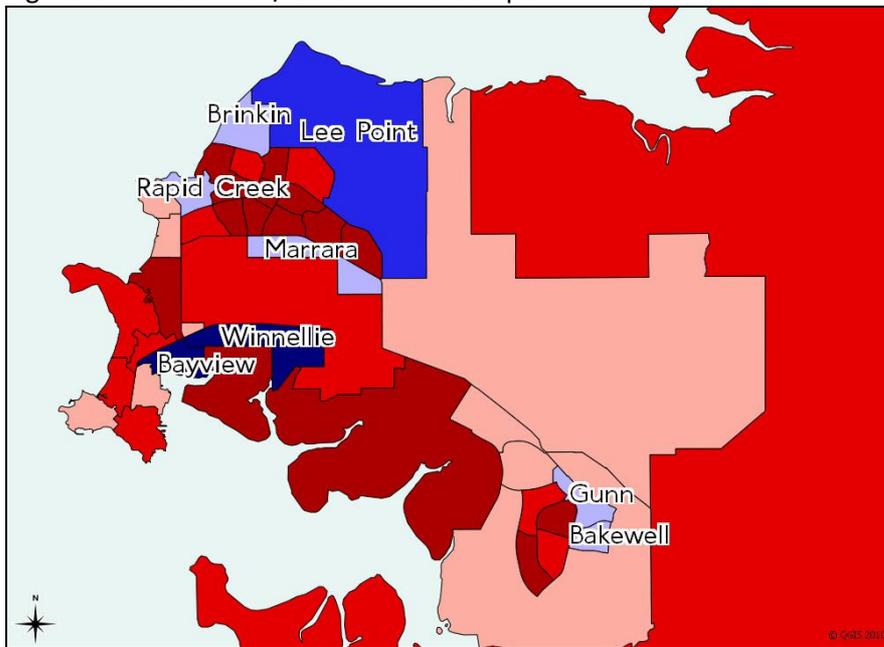
and over were arrivers. Interestingly three suburbs with a high percentage of people aged 55 years and over who were not in the Territory five years before the Census were Marrara (17.7%), Winnellie (30.9%), and Lee Point (62.5%). These are also the suburbs where the main caravan parks are located (respectively Malak and KOA, Shady Glen, and Lee Point). Construction of new houses in the suburb of Lyons at Lee Point wasn't completed when the census was taken and therefore the high proportion of older people who settled in the Lee Point – Leanyer Swamp SLA cannot be attributed to the new suburb.

In the case of Palmerston, the suburbs of Durack, Bakewell and Gunn recorded higher proportions of arrivers in the older population.

Net Migration

The three 'caravan park suburbs' also stood out when we considered migration balance for each of the Darwin SLAs. Figure 8 represents the ratio of arrivers to leavers for each SLA in the greater Darwin region. Negative migration balance is represented in red (ratio <50 in dark red, 50-75 in red and 75-100 in light red) while positive migration balance is represented in blue (ratio >200 in dark blue, 150-200 in blue and 100-150 in light blue).

Figure 8 - ratio arriver/leaver for the 55+ per SLA.



Source: ABS Census of Population and Housing, 2006

From this map, it is obvious that the majority of suburbs experienced negative migration in the older age groups in the five years preceding the Census. The only SLAs with positive migration for older people in the Greater Darwin area were Winnellie, Bayview and Lee Point, and to a lesser extent Brinkin, Marrara and Rapid Creek in Darwin, and Gunn and Bakewell in Palmerston.

## Spatial patterns of in- and out-migration of older people in the Northern Territory.

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### Summary and Discussion

Data on older population movements between the Territory and the other Australian states showed that Queensland was the destination of choice for an overwhelming majority of the people aged 55 years and over who had left the Territory in the 5 years preceding the 2006 Census, possibly linked to (pre)retirement amenity and lifestyle mobility (Stimson and Minnery, 1998; Newbold and Bell, 2001).

Meanwhile the majority of arrivers aged 55 years and older settled in the Greater Darwin region, followed by Remote areas and Alice Springs. In the Darwin region, a large majority of arrivers came to Darwin, followed by Palmerston and the Litchfield Shire. Zooming down to the Statistical Local Area level revealed that the SLAs which attracted the highest numbers of arrivers within the Darwin region were the City, Nightcliff and rural areas, but if we examined the proportion of arrivers in the 55 years and over population for each SLA, the highest densities were found in Lee Point, Winnellie and Durack.

The high number of arrivers in the rural areas was at first glance surprising considering that older people are usually thought to prefer moving close to services and amenities. However, arrivers only represented a small portion of the people aged 55 years and over in these areas and the migration balance for these age groups was largely negative.

While net migration was negative for the Territory overall, the ratio was lowest for Alice Springs followed by the Darwin region and Remote areas. Disparities between remote regions highlighted the specificities of remote population demographics and the influence of local factors on small populations. In the East Arnhem region in particular, for the projected large increase in the proportion of older people to eventuate, life expectancy amongst the Indigenous population needs to increase but the trend of high out-migration of retirement age non-Indigenous people from Nhulunbuy would also need to be reversed. Within the Darwin region, few suburbs had positive migration for people aged 55 years and over, and the highest gains were again recorded in Lee Point and Winnellie.

Breaking net migration down into different age groups, we noticed that for people aged 75 years and over, the balance was positive for both the Darwin region and Alice Springs, but very negative for Remote areas. This was also manifest in the particularly low level of representation of the old olds (75+) amongst arrivers in remote areas compared to urban areas. This cannot only be explained by reduced mobility in older age as the old olds' share of the arrivers in urban areas was close to their share of the total 55+ population but it could be a reflection of the lower attractiveness of regions situated far from infrastructure and services for people in the older age groups and whose support needs are greater.

On the whole, settlement patterns of seniors in the Northern Territory showed that the Darwin Region attracted the greatest number of people aged 55 years and over but the analysis of the distribution of arrivers and leavers amongst the different age groups highlighted a number of challenges. For example, the negative net migration in the older age groups in the Palmerston and Litchfield Shire regions raises questions about the scope of new infrastructure and services required in these areas. This is not to say that Palmerston or the future town of Weddell will be unsuccessful in attracting older people or operating as service centres to the older populations of the rural areas if they do indeed provide better services geared towards the needs of seniors, but research has shown that this is only one in a number of key factors which influence people's choice of residence as they get older (Carson, 2009) which the large out-migration of older people to Queensland mentioned above seems to corroborate.

The highest migration deficit for all areas was in the 65-74 age group, which most likely corresponds to the move into retirement for a lot of people. What is interesting is that (Remote

### Spatial patterns of in- and out-migration of older people in the Northern Territory.

NT excepted) the trend was then reversed at older age and all areas had positive migration balance in the 75 years and older group. Caution needs to be exercised given the small numbers in this age group but if less people leave the Territory after 75 it would then be interesting to gain information about the things that keep them here. This could be significant for population ageing in the Territory. Indeed, if the net migration deficit from the Territory continues, this could result in considerable outflow of people over the next 10 to 15 years, or possibly earlier given the high exit rates of public servants in their fifties (see our brief on the economic characteristics of older arrivers, leavers and stayers in the NT). In this context it would be all the more important to find out what might entice them to stay.

The temporary nature of arrivers is indicated by the remarkably high number of people who moved in to the areas where the caravan parks are located. As there is nothing to differentiate these suburbs from neighbouring suburbs with much lower numbers of arrivers (and indeed Winnellie hardly rates as a residential suburb), one assumption is that these people have settled in the caravan parks and are therefore less likely to stay in the Territory in the long term. They may be part of the grey nomads (the Census was conducted in August which is peak tourist season in Darwin) staying in Darwin for the Dry season and therefore listing the Territory as their place of residence, or people with dual-residency who come up to Darwin for the Dry or to make the most of the work opportunities that this season offers in the Top End. On the other hand, these suburbs also had positive net migration which might then go against the theory of temporary residence. Further research is needed on the characteristics of older Territorians and on the impact of migration on population ageing to inform decision making and amenities planning in the context of what could be a major demographic transition for the Northern Territory.

Spatial patterns of in- and out-migration of older people in the Northern Territory.

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