

## THE NATURE OF MOVEMENT IN TO AND OUT OF THE NORTHERN TERRITORY AS SHOWN BY THE 1991 CENSUS

### Preface

During the first six months of 1994, the Australian Bureau of Statistics conducted a detailed investigation of the procedures and issues involved in estimating the resident population of the Northern Territory. This investigation enabled us to improve our understanding of the characteristics of the Northern Territory's resident population, and also to be better able to inform users of population statistics about the nature of population change in the Northern Territory.

This information paper examines one particular aspect of the Northern Territory's population - its high mobility. The Northern Territory consistently has a higher rate of population turnover than any other State or Territory. The paper looks at the age and sex structure of movers in to and out of the Territory, as well as comparing movement patterns of Aboriginal and non-Aboriginal people, and overseas born and Australian born people. There is also a regional analysis of the impact of mobility. The methodologies and observations for this paper have been built on previous studies of internal migration in Australia.

The monitoring of the Northern Territory's population will be an ongoing project within the ABS, and further analysis of the components of population change is planned. For more information, contact the ABS Northern Territory on (089) 432111.

**Bob Harrison**  
Northern Territory Statistician  
October 1994

### INQUIRIES

- for further information about statistics in this publication and the availability of related unpublished statistics, contact Dean Carson on Darwin (089) 43 2177 or any ABS office.
- for information about other ABS statistics and services please refer to the back page of this publication.

## Summary of Findings

The 1991 Census of Population and Housing included information about people's place of residence in August, 1986. 'Movers In' to the Northern Territory were those who indicated a usual residence in the Territory on Census night, but a usual residence in another state or territory in 1986. 'Movers Out' indicated a usual residence in the Northern Territory in 1986, but were resident in another state or territory on Census night. The Census also asked people which state they had been resident in in August, 1990. This information paper considers only movers from one state or territory to another, and does not consider movers within states, and movers in from or to overseas.

2. The Northern Territory could be characterised by a high rate of population turnover resulting from interstate migration between 1986 and 1991. The Northern Territory had a higher proportion of movers in than any state for both the 1986 to 1991 period, and the 1990 to 1991 period. Only the Australian Capital Territory had similar proportions of movers in. The Northern Territory had a higher proportion of movers out than any other state or territory. The highest percentage of movers in to the Northern Territory were from Queensland, South Australia, and New South Wales. The highest percentage of movers out went to Queensland, South Australia, and New South Wales. A series of Appendices map the flows in and out of the Northern Territory for the total population, and for the Aboriginal population.

3. An analysis of movers in and out of the Northern Territory indicates no real difference between proportions of male and female movers. There were far lower proportions of movements recorded for the Aboriginal population than for the non-Aboriginal population. In addition to higher proportions of movers in and out than other states and territories, population turnover to and from the Northern Territory was characterised by the age structure of movers. There was a sharp peak of movement (both in and out) among 20 to 35 year olds, and a steady decline in movement among older age groups. Movements for Australia in total showed less marked peaks, and a less rapid decline in mobility among older age groups.

4. There was strong net movement of people in to the Northern Territory for the 20 to 24 and 25 to 29 year age groups, and a net movement out in all other age categories under 70 years. The age distribution of net movers in to New South Wales and Queensland were quite different from that of the Northern Territory. New South Wales had a very small stable net movement out in all age groups, and Queensland a net movement in for all age groups. There were less marked differences in net movement among age groups for New South Wales and Queensland than for the Northern Territory.

5. The low proportion of movers among the Aboriginal population was reflected in small proportions of movers in every age category. There may be some differences in movement patterns between male and female Aboriginal movers, but the small numbers of recorded movers involved would cast doubt on any conclusions.

6. Overseas born people were 19% of the Northern Territory's population according to the 1991 Census. Previous research has suggested that overseas born people are more highly mobile than Australian born, but this does not appear to be the case with movers in and out of the Northern Territory. There was a lower proportion of overseas born movers in, and a similar proportion of movers out. There is a net movement out of overseas born in all age categories under 70 years.

7. The greatest volume of movers in and out of the Northern Territory come from and go to Darwin City. The greatest proportion of movers in were to Palmerston-East Arm statistical subdivision, and the greatest proportion of movers out were from Darwin City subdivision. There were net movements out from the Darwin City, Alligator, East Arm, Barkly and Central Northern Territory statistical subdivisions. There were net movements in to the Palmerston-East Arm, Darwin Rural Areas, Daly, and Lower Top End statistical subdivisions.

8. The high level of population mobility that characterises the Northern Territory has important implications for social planning and policy making, and for estimating the population of the Territory. This paper provides an overview of some of the key patterns of interstate migration to and from the Northern Territory as recorded in the 1991 Census. There is scope to extend the range of research into interstate migration to further highlight the unique nature of migration to and from the Territory, and to provide more information about the characteristics of migrators. Of particular importance to population estimation may be the unusual characteristics of the Aboriginal population as well as the high levels of population turnover and the age structure of movers and the striking non-uniform age distribution of migrators to and from the Northern Territory.

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Appendix : Major Movement Flows In to and Out of The Northern Territory

## 1. Introduction

The Northern Territory has experienced the highest population turnover through internal migration of any State or Territory of Australia for at least the 1976-81 (Maher and McKay, 1986), and 1981-86 (Bell, 1992). Bell (1992:xxv) recognised that "Internal migration is one of the fundamental processes shaping the settlement pattern of Australia... An understanding of migration is needed...to guide planning, investment decisions and the formulation of social policy." The high level of population turnover in the Northern Territory also has implications for estimating the usual resident population of the Territory.

The scope of this paper is to examine the nature of interstate migration to and from the Northern Territory as recorded by the 1991 Census. Movers in to the Northern Territory from overseas are excluded from the analysis because there is no comparable data available about movers from the Territory to overseas. Additionally, no analysis of movements within the Northern Territory is included in this paper, although such analysis may provide valuable insights about mobility. The 1991 Census provided information about changes in address from August 6, 1986 to August 6, 1991. Changes in the state of residence from August 6, 1990 to August 6, 1991 were also recorded. This paper concentrates on data related to the 1986 - 1991 period. This data allows regional analysis of movers. Where appropriate, comparisons between the 1986-1991 period and the 1990-1991 period are made. Observations are also made about changes in patterns observed in this study compared with patterns noted in previous studies (Bell, 1992; Taylor, 1989; Maher and McKay, 1986; Rowland, 1979). Comparisons with previous Census periods are not the focus of this paper, and the opportunity exists for a more detailed analysis of trends over time as a separate exercise. It is not within the scope of this paper to analyse interstate migration to and from other States, but comparisons are made where they highlight differences between movement to and from the Northern Territory and movement to and from other states. This paper examines movement patterns of males, females, Aboriginal, and non-Aboriginal people, and the overseas-born and Australian-born population. There may be some value in examining the marital status, occupation, income and other variable characteristics of movers, but this paper does not attempt such an examination, preferring to concentrate on constant characteristics such as gender and birthplace.

The intention of this paper is to contribute to an understanding of which groups have the greatest propensity for interstate migration to and from the Northern Territory. An understanding of the nature of population turnover can assist social planners and policy makers in developing projects and resources, as well as contribute to the Australian Bureau of Statistics' methods of population estimation.

## 2. Defining Movers In To and Out Of the Northern Territory

Results from the 1991 Census of Population and Housing included information about changes in place of usual residence between August 6, 1986 and Census night, 1991, and between August 6, 1990 and Census night, 1991. The Census asked each person to indicate their usual address at August 6, 1986, and the State or Territory of usual address on August 6, 1990. The Census provided information about movement in to and out of the Northern Territory for the five year period at a Statistical Local Area level. Information about movements for the one year period was available at a State and Territory level only. Information about movements for the five year period (1986 - 1991) excluded persons aged less than five years on Census night, 1991. Information about movements for the one year period (1990 - 1991) excluded persons aged less than one year on Census night, 1991. It is important to note that movements recorded for the one year period did not constitute a subset of movements for the five year period. The Census provided information about places of residence at two points of time, and no information about additional movements in the intervening period. A person may have been resident in the Northern Territory in 1986, not in 1990, and resident in the Territory in 1991; therefore being recorded as a movement in for the one year period, but not the five year period. People moving out of and then returning to the Northern Territory between 1986 and 1991 would not be recorded as a movement. Likewise there would be no recorded movement for those who were resident in the Northern Territory in 1986, and again in 1991, but had moved interstate during that period.

'Movers In' to the Northern Territory were defined as those who indicated their usual residence in a State or Territory outside of the Northern Territory in 1986 or 1990, but had their usual residence in the Northern Territory on Census night, 1991. 'Movers In'

excluded persons who were resident overseas in 1986 or 1990. 'Movers Out' of the Northern Territory were defined as those who were resident in a State or Territory outside of the Northern Territory in 1991, but indicated that their usual residence had been in the Territory in 1986 or 1990. 'Movers Out' excluded any persons who had moved overseas.

Proportion of movers in and movers out were calculated by dividing the numbers of movers by the population as enumerated in the 1991 Census to maintain consistency with previous studies. For example, the proportion of male movers in was calculated by dividing the number of male movers in by the total male population of the Northern Territory as recorded by the Census.

### 3. Interstate Migration To and From the Northern Territory

#### 3.1. Movers In to Each State and Territory

The total volume of movement in to the Territory for the five year period (1986 - 1991) was a proportion of 0.17 of the Northern Territory's 1991 population. The total volume of movement in to the Territory for the one year period (1990 - 1991) was a proportion of 0.08 of the Northern Territory's 1991 population. This compares to an Australia-wide proportion of 0.05 of the 1991 population who had changed their State or Territory of residence from 1986 to 1991, and a proportion of 0.02 changing State or Territory of residence from 1990 to 1991. The 1991 population of the Northern Territory therefore included a much higher proportion of movers in than populations of Australian States and Territories in general. Table 3.1 lists the proportion of movers in to each State and Territory. Only the Australian Capital Territory had a similar proportion of movers in to the Northern Territory. The proportions were much lower for every other State.

Table 3.1: Proportions of Movers In To Each State and Territory

	<i>Movers in 1986-91</i>	<i>Movers in 1990-91</i>
New South Wales	0.03	0.01
Victoria	0.03	0.01
Queensland	0.08	0.03
South Australia	0.04	0.02
Western Australia	0.04	0.02
Tasmania	0.06	0.03
Northern Territory	0.17	0.08
Australian Capital Territory	0.17	0.07
Australia	<b>0.05</b>	<b>0.02</b>

#### 3.2. Movers Out of Each State and Territory

Table 3.2 demonstrates the higher rate of movement out of the Northern Territory compared with other States and Territories. The number of movers out of the Northern Territory represented a proportion of 0.20 of the total population for the five year period, and 0.09 for the one year period. The Australian Capital Territory had the next highest proportion of movers out (0.16) for the five year period. Western Australia (0.03) had the lowest proportion of movers out for the five year period.

Table 3.2: Proportions of Movers Out Of Each State and Territory

	<i>Movers out 1986-91</i>	<i>Movers out 1990-91</i>
New South Wales	0.05	0.01
Victoria	0.04	0.04
Queensland	0.04	0.01
South Australia	0.05	0.01
Western Australia	0.03	0.01
Tasmania	0.06	0.01
Northern Territory	0.20	0.09
Australian Capital Territory	0.16	0.03
Australia	<b>0.05</b>	<b>0.02</b>

#### 3.3. States of Origin and Destination of Northern Territory Movers

The highest percentage (32%) of movers out of the Northern Territory were resident in Queensland in 1991. Queensland (23%) was also the most common state of residence in 1986 for movers in to the Northern Territory. Table 3.3 shows the States of origin and destination for movements in to and out of the Northern Territory for the 1986 - 1991 period. The volume of movement is indicated, with each State's

percentage share of total movement shown in brackets. It can be noted that a higher percentage of people moved out to Queensland than moved into the Northern Territory from Queensland. There were more movers in from New South Wales, Victoria, and South Australia than movers out to these states. These observations are consistent with Bell's (1992) analysis of interstate migration flows for the 1981 - 1986 period.

Table 3.3: States of Origin and Destination

	<i>Movers out 1986-91</i>		<i>Movers in 1990-91</i>	
	<i>Volume</i>	<i>Proportion</i>	<i>Volume</i>	<i>Proportion</i>
New South Wales	5 536	0.16	5 965	0.20
Victoria	4 129	0.12	5 025	0.17
Queensland	10 934	0.32	6 949	0.23
South Australia	6 546	0.19	6 651	0.22
Western Australia	5 271	0.15	4 437	0.15
Tasmania	676	0.02	681	0.02
Australian Capital Territory	1 127	0.03	726	0.02
<b>Australia</b>	<b>34 219</b>	<b>1.00</b>	<b>30 434</b>	<b>1.00</b>

The Appendix maps the movements in and out of the Northern Territory at regional levels. As would be expected, major movements in to the Northern Territory came from the eastern seaboard, particularly the high population areas of the coastal strip from Brisbane to Adelaide, and are directed towards Darwin. There was also a movement of people from Perth to Darwin. There were some smaller movements from Sydney, Melbourne, Northern South Australia, and Adelaide to Central NT, and from Northern Queensland to Darwin. Major movements out of the Northern Territory were from Darwin to the east coast of Australia, Adelaide, and Perth. There were also movements from Central NT to all mainland capitals.

While smaller in volume, movements by Aboriginal people into the Northern Territory were more regionally oriented than total population movements. In addition to movements in from capital cities (excluding Hobart and Melbourne), there were notable movements in from Northern and Far North Queensland to Darwin, and from North West Queensland to Darwin, Lower Top End, Barkly, and Central NT. Aboriginal people moved in to Darwin and Lower Top End from Kimberley (Western Australia), and to Central NT from Northern South Australia.

Movements of Aboriginal people were mainly out of Darwin to mainland capitals, Northern and Far North Queensland, and Kimberley. There were movements from Lower Top end to Far North Queensland, Brisbane, Adelaide, and Central Western Australia. From Central NT, there were movements of Aboriginal people to Kimberley, Central Western Australia, Perth, Northern South Australia, Adelaide, Melbourne, and Northern Queensland.

### 3.4. Movers In to the Northern Territory

On Census night, 1991, there were 30434 people resident in the Northern Territory who were resident in another State or Territory in 1986. Of these, 16188 were male and 14305 were female. There were 1481 persons who identified as Aboriginal or Torres Strait Islander who had moved in to the Northern Territory from interstate. Table 3.4 shows the number of movers in to the Northern Territory, and defines them as a proportion of the 1991 population for each category.

Table 3.4: Movers In To The Northern Territory

	<i>Movers in 1986-91</i>		<i>Movers in 1990-91</i>	
	<i>Volume</i>	<i>Proportion</i>	<i>Volume</i>	<i>Proportion</i>
Male	16 188	0.18	7 744	0.08
Female	14 305	0.17	6 500	0.08
Aboriginal/Torres Strait Islander	1 481	0.04	1 035	0.03
Not Aboriginal/Torres Strait Islander	28 696	0.22	13 029	0.10
<b>Total</b>	<b>30 434</b>	<b>0.17</b>	<b>14 244</b>	<b>0.08</b>

Table 3.4 indicates that a similar proportion of males and females moved in to the Northern Territory for both time periods. Table 3.4 also indicates that the Aboriginal

and Torres Strait Islander population of 1991 had a much lower proportion of movers in than the non-Aboriginal population. It appears that, while the volume of male, female, and non Aboriginal and Torres Strait Islander movements for the one year period was slightly less than half of the volume for the five year period, the volume of Aboriginal movers for the one year period was three quarters of the five year volume. This high ratio may be partially explainable by the low numbers of movers involved, or may reflect a different pattern of movement among Aboriginal and Torres Strait Islander people.

### 3.5. Movers Out of the Northern Territory

On Census night, 1991, there were 34260 persons resident in other States and Territories of Australia who had been resident in the Northern Territory in 1986. Of these, 17988 were male and 16272 were female. There were 1569 people who identified as Aboriginal or Torres Strait Islander who had moved out of the Northern Territory to other States and Territories. Table 3.5 shows the number of movers out of the Northern Territory to other States and Territories, and the proportion of the total 1991 population represented by this number.

Table 3.5: Movers Out Of The Northern Territory

	Movers out 1986-91		Movers out 1990-91	
	Volume	Proportion	Volume	Proportion
Male	17 988	0.20	8 259	0.09
Female	16 272	0.19	6 894	0.08
Aboriginal/Torres Strait Islander	1 569	0.04	1 019	0.03
Not Aboriginal/Torres Strait Islander	32 317	0.25	13 954	0.11
<b>Total</b>	<b>34 260</b>	<b>0.20</b>	<b>15 153</b>	<b>0.09</b>

Table 3.5 indicates a similar pattern of movers out to movers in, with negligible gender differences, but a much lower proportion of Aboriginal than non-Aboriginal movers.

### 3.6. Net Movers In to the Northern Territory

There was a net movement out of the Northern Territory for males, females, Aboriginal and Torres Strait Islanders, and non-Aboriginals. Overall, the Northern Territory recorded a net loss to interstate of just under 4000 (a proportion of 0.02 of the 1991 population). Bell (1992) noted a net loss for the 1981-1986 period, a change from gains in the previous two intercensal periods. Reasons for this change can be speculated about, and may include factors such as the heavy reliance on public investment and consequent reduction in the real value of that investment (Bell, 1992), the lack of higher level job opportunities, and perceptions of the isolation and 'distance' of the Northern Territory (Taylor, 1989). Table 3.6 shows the number and proportion of net movers in to the Northern Territory for the 1986 - 1991 period and the 1990 - 1991 period. The high rate of both movement in and movement out of the Northern Territory indicated in Tables 3.4 to 3.5 resulted in a small overall net movement out to other States and Territories.

Table 3.6 : Net Movers In To The Northern Territory

	Movers in 1986-91		Movers in 1990-91	
	Volume	Proportion	Volume	Proportion
Male	-1 800	-0.0200	-515	-0.0060
Female	-1 967	-0.0200	-394	-0.0050
Aboriginal/Torres Strait Islander	-88	-0.0020	16	0.0004
Not Aboriginal/Torres Strait Islander	-3 621	-0.0300	-925	-0.0070
<b>Total</b>	<b>-3 767</b>	<b>-0.0200</b>	<b>-909</b>	<b>-0.0050</b>

## 4. Characteristics of Movers In To and Out Of the Northern Territory

### 4.1. Age Distribution

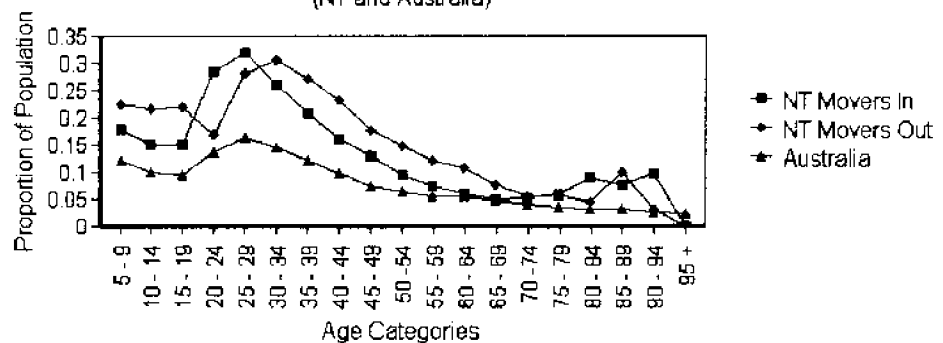
An analysis of the age of movers in to and out of the Northern Territory for the 1986 to 1991 period highlights a peak of movement activity in the 20 to 24, 25 to 29, and

30 to 34 year age groups. Figure 1 displays the age distribution of movers in to and out of the Northern Territory, and the age distribution of the total number of movements across state/territory boundaries throughout Australia. Of note is the higher rate of movement in and out of the Northern Territory in each age category compared to movements throughout Australia. Both the Northern Territory and Australia show peaks of movement activity in the 20 to 34 years age categories, with a decline in movement activity thereafter. This pattern is consistent with observations of previous Census results (Bell, 1992). Movement out patterns for the Northern Territory mirror movement in patterns, but occur in older age categories. While the peak of movers in occurs in the 25 to 29 year age category, the peak of movers out occurs in the 30 to 34 year age category. This 'lag' is evident because movements out may be recorded up to five years after they actually occur. There was a higher proportion of movers out in all age categories under 75 years except the 20 to 24 and 25 to 29 year age categories. Figure 1 demonstrates that the 'peaks' and 'troughs' of interstate movement to and from the Northern Territory were far more pronounced than interstate movements in Australia generally.

#### 4.2. Age By Sex

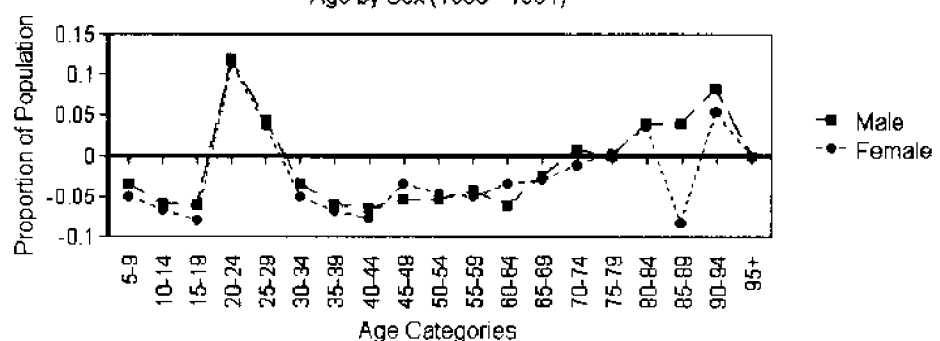
Figure 2 converts interstate movements in and out of the Northern Territory to net movements in, and shows these net movements for males and females in each five year age category. There are no major differences in the movement patterns of males and

Figure 1: Age Distribution of Movers 1986 - 1991  
(NT and Australia)



females in any age category under 80 years. Proportions of net movers in later age categories are difficult to comment on due to the small populations and number of movers involved. Figure 2 demonstrates a sharp peak of net movement in for the 20 to 24 and 25 to 29 year age categories. All other age groups less than 75 years recorded a net movement out for the 1986 to 1991 period. Observations of movement patterns for people aged over 70 are dramatically influenced by the very small numbers involved.

Figure 2: Net Movers in To The Northern Territory  
Age by Sex (1986 - 1991)

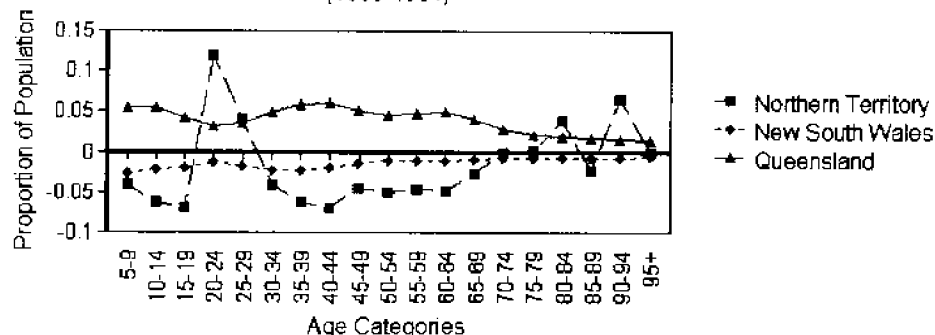




#### 4.3. Age Comparison With New South Wales and Queensland

Figure 3 compares the Northern Territory's net movement pattern with that of New South Wales, which recorded an overall net movement out for the 1986 to 1991 period, and Queensland which had a net movement in for the same period. Figure 3 reinforces the observation of high population turnover for the Northern Territory in all age categories, and the contrast between patterns for the 20 to 29 age categories and all other age categories. Both Queensland and New South Wales displayed far smoother movement patterns across the various age groups.

Figure 3 : Net Movers In To NT, NSW and QLD  
(1986-1991)

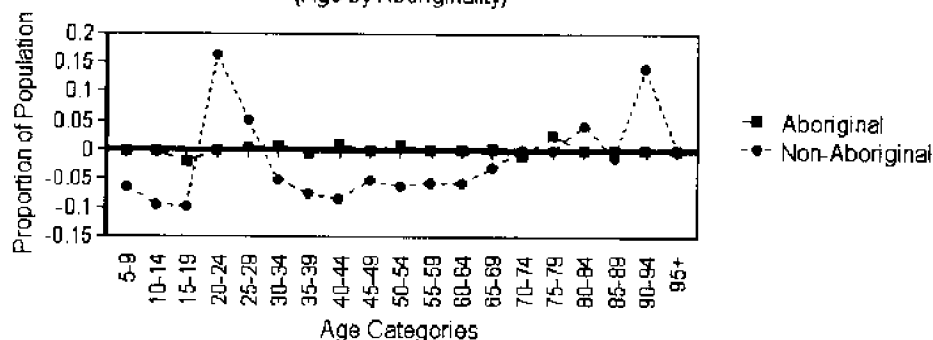


The Northern Territory can be distinguished from other States and Territories in 1991 by its comparatively young age structure. The median age for the Northern Territory was 28 years, compared with 32 years for Australia. Figure 3 indicates large movements in to the Territory by 20 to 29 year olds, and movements out in older age categories. Figure 3 also shows a movement out of the Territory by people aged less than nineteen. The pattern of movement for all three States and Territories depicted in Figure 3 is consistent with those observed in the 1981 to 1986 intercensal period (Bell, 1992).

#### 4.4. Aboriginality

In contrast to the lack of major differences in movement patterns between males and females, there was a large difference in the proportions and nature of movements of the Aboriginal and non-Aboriginal populations of the Northern Territory. The proportion of Aboriginal movers is much lower in each age group, and it is difficult to make any comments about differences in movement patterns between age categories for the Aboriginal population. Figure 4 compares movement patterns for the Aboriginal and non-Aboriginal populations.

Figure 4 : Net Movers In To The Northern Territory  
(Age by Aboriginality)



A further analysis of Aboriginal interstate movements as recorded by the 1991 Census is unlikely to reveal a great deal about the nature of movements by that population. Figure 5 compares male and female movements for the Aboriginal population in the 1986 to 1991 period, and Figure 6 shows that the comparative low rates of movement of the Aboriginal population was apparent for the 1990 to 1991 period. Seemingly more marked movements in the 65 to 79 year age categories in the 1990 -91 period are a reflection of the low populations in these age categories.

Figure 5: Aboriginal Movers In To The Northern Territory  
(Age by Sex)

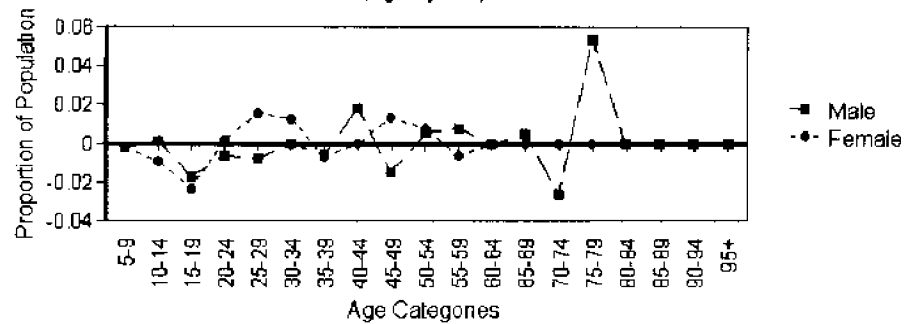


Figure 5 indicates that there may be gender differences in movement patterns for the Aboriginal population, with a net movement in of females in the 20 to 35 year age categories, and a net movement out of males in those categories. The proportions are very low, however, and any observations relating to gender differences must be considered accordingly. For example, the peak movement in of 75 to 79 year old males represented a net movement in of three Aboriginal males.

Figure 6: Net Movers In To The Northern Territory 1990-91  
(Age by Aboriginality)

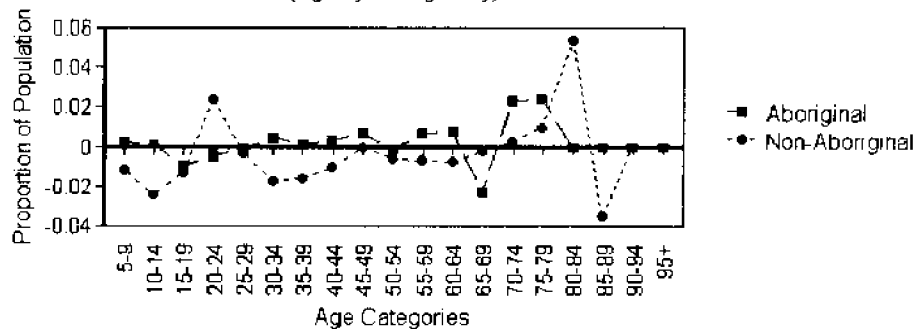


Figure 6 again shows the lower proportion of Aboriginal movers. Patterns observed for the 1986 to 1991 period (Figures 2 and 4), appear to be evident for the 1990 to 1991 period.

#### 4.5. Overseas-born Movers

Bell (1992) provided evidence from the 1986 Census that mobility among the overseas born population was generally higher than that of the Australian born population. Overseas born people were 19% of the Northern Territory's population at the 1991 Census. Higher mobility of overseas born people was not a feature of movement in to and out of the Northern Territory according to the 1991 Census. A proportion of 0.14 of the overseas born population were movers in, while the proportion was 0.19 for the Australian born population. Movers out proportions were 0.20 for both populations. The net movement in for overseas born was -0.06, and -0.01 for Australian born. Figure 7 shows the age distribution of net movers in to the Northern Territory for the overseas born and Australian born populations. The overseas born population is characterised by a net movement out in all age categories under 70 years.

Figure 7: Overseas-born and Australian-born Net Movers In To NT  
(1986 - 1991)

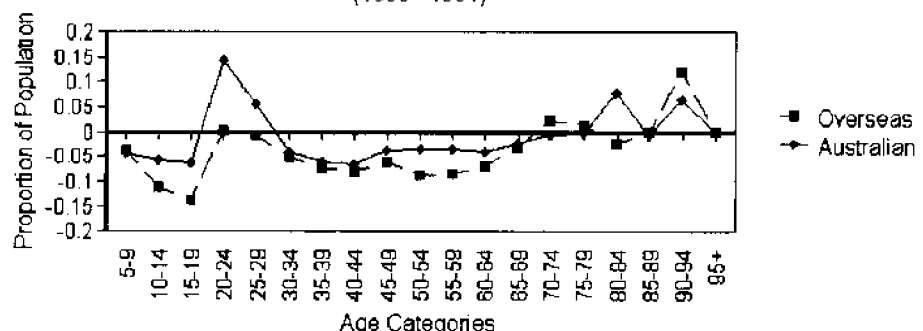


Figure 7 shows that there was no peak of movement in for this population in the 20 to 24 and 25 to 29 year age categories, as was apparent for the Australian born population. The lower overall mobility of the overseas born population may be related to the age structure of the overseas born population. While 59% of the Australian born population of the Northern Territory were aged less than 30 years, 57% of the overseas born population was aged between 30 and 59 years. There was, therefore, a greater proportion of the Australian born population in the younger, more mobile age categories.

## 5. Interstate Migration To and From Northern Territory Statistical Subdivisions

Table 3.2 showed the State of origin and destination over movers in to and out of the Northern Territory for the 1986 to 1991 period. The major States of origin were Queensland, South Australia, and New South Wales. These were also the most common states of destination. Table 6 showed a net movement out of the Northern Territory for the five year period of nearly 4000, nearly all of which was accounted for by movements in to and out of Darwin City. This section of the paper looks in more detail at the geographic patterns of movement in to and out of the Northern Territory. Regional analysis has been restricted to statistical divisions (SDs) in States and Territories other than the Northern Territory, and statistical sub-divisions (SSDs) in the Northern Territory. It was possible to do an analysis based on statistical local areas (SLAs), but observations were restricted by small numbers of movements to and from individual SLAs. The vast majority of movements in to and out of the Northern Territory are in to and out of Darwin City, reflecting Darwin's role as the main population, business and administration centre of the Northern Territory. Movements involving other statistical subdivisions are quite small in number.

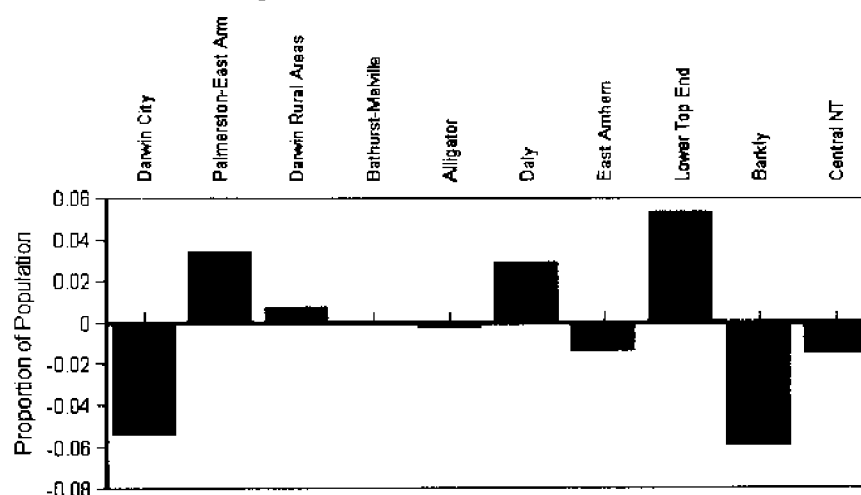
Table 5.1 shows the proportion of movers in to and out of Northern Territory from each SSD. Intra-Territory movements are not recorded. Figure 8 illustrates net movement as a proportion of each SSD's 1991 population. The highest proportion of movers in were to Palmerston-East Arm (0.21), Darwin City (0.20), and Lower Top End (0.20). The highest proportion of movers out were from Darwin City (0.25), Barkly (0.21), and Central NT (0.18). Conversely, the lowest proportions of movers in were to Bathurst-Melville (0.03) and Alligator (0.10), and the lowest proportions of movers out were from Bathurst-Melville (0.03) and Alligator (0.10). Table 7 lists the number of movements, and the proportion these movements are of the SSD population is in brackets.

Table 5.1 : Movement In To and Out Of Northern Territory SSDs(1986 - 1991)

	<i>Movers in</i>		<i>Movers out</i>	
	<i>Volume</i>	<i>Proportion</i>	<i>Volume</i>	<i>Proportion</i>
Darwin city	13 962	0.20	17 763	0.25
Palmerston-East arm	1 731	0.21	1 449	0.17
Darwin rural areas	1 380	0.12	1 298	0.11
Bathurst - melville	56	0.03	56	0.03
Alligator	681	0.10	700	0.10
Daly	411	0.11	305	0.08
East Arnhem	1 783	0.16	1 951	0.17
Lower Top End	3 337	0.20	2 431	0.14
Barkly	1 027	0.15	1 434	0.21
Central N.T.	5 906	0.16	6 486	0.18

Figure 8 shows net movements out of Darwin City, Alligator, East Arnhem, Barkly and Central NT. Net movements in were recorded in Palmerston-East Arm, Darwin Rural Areas, Daly, and Lower Top End. These observations from the 1991 Census are consistent with movement patterns observed in the 1986 Census (Bell, 1992). Taylor (1989) noted a decrease in the amount of residential land available in Darwin City, and suggested that future population growth was more likely to occur in the surrounding SSDs of Palmerston-East Arm and Darwin Rural Areas. Figure 8 shows the largest net movement in to Lower Top End, and the largest net movement out of Barkly. The low proportion of movers in and out of Bathurst-Melville and Alligator resulted in very small net movements.

Figure 8 : Net Movers In To NT Statistical SubDivisions



## 6. Conclusions and Implications for Further Research

The high level of population mobility that characterises the Northern Territory has important implications for social planning and policy making, and for estimating the population of the Territory. Tables 1 and 2 showed that the Northern Territory had higher proportions of movers in and out than other States. The overall small population size of the Northern Territory may be a factor in the large proportions of movers. There are only a small number of sizeable population centres in the northern Territory, so movements based on employment searches are more likely to result in a change in state of residence than movements in larger states with a greater number of population centres. Figure 3 demonstrated that the patterns of interstate migration to and from the Northern Territory were more variable than movements involving Queensland and New South Wales. In addition to high population turnover, the most notable features of interstate migration to and from the Northern Territory for the 1986 to 1991 period were : the age structure of movers; the lack of difference between male and female movement patterns; the differences in movement patterns between the Aboriginal and non-Aboriginal populations; the relatively high mobility of the Australian-born population in comparison with the overseas-born population of the Northern Territory; and the regional patterns of movement in to and out of the Territory.

### 6.1. Age Structure

The greatest volume of movement both in to and out of the Northern Territory occurred in the 20 to 24 and 25 to 29 years age categories. Bell (1992) suggests that reasons for this include people leaving the parental home, the pursuit of higher education, pursuit of employment, and marriage. The Northern Territory would appear to be an attractive place for 20 to 29 year olds, as the greatest net movement in to the Territory occurred in this age range. Conversely, there was a consistent trend of movement out of the Territory by people aged 35 to 69. This movement was accompanied by a movement out of people aged less than 19 years, indicating families leaving the Territory. This pattern has persisted over at least the last three intercensal periods (Bell,1992). The age distribution of movers suggests that there was no stronger movement out of retirement aged people than middle aged people and children.

### 6.2. Males and Females

Bell (1992) suggests that patterns of movement of males and females are usually different because of different median age of marriage, and a higher participation by males in more mobile occupations and industries. Gender differences in movement patterns are not apparent in the analysis of movements into and out of the Territory as recorded by the 1991 Census, although Bell suggests that differences are more likely to occur at an intra-state level.

### 6.3. Aboriginal and Non-Aboriginal People

Movement patterns in to and out of the Northern Territory do reflect differences between the Aboriginal and non-Aboriginal populations. The differences may indicate that the Aboriginal population is not nearly as mobile as the non-Aboriginal population, or that the Census does not record the movements that occur within the Aboriginal population. This could occur because of poor recording of prior residence due to Census collection procedures or poor recall, a lack of understanding by respondents of the concept of 'usual residence' (Taylor, 1989), or that seasonal

movements are not detected because of the consistent conducting of the Census in the 'dry' season. Taylor (1989) claims that a better analysis of population change in the Northern Territory will rely on an improved understanding of these issues. This paper also demonstrates that the places that Aboriginal people move to and from may be different from regions of origin and destination of non-Aboriginal people. Movements of Aboriginal people tended to occur in localised areas, and may be related to cultural or language groups, whereas movements of non-Aboriginal populations appear to be related more to the populous regions of the eastern seaboard.

#### 6.4. *Australian-born and Overseas-born People*

The Northern Territory's overseas born population was not as highly mobile as the Australian born population. This may be a reflection of the age structure of the overseas born population, which was more weighted towards older, less mobile age groups than the Australian born population. There was a net movement of overseas born people out of the Northern Territory.

#### 6.5. *Regional Patterns*

Regional patterns of movement highlight a net flow out of Darwin City and Barkly, and net movement in to Palmerston-East Arm, Daly, and Lower Top End. Darwin City was prominent as a destination and origin region, reflecting its role as the economic and administrative centre of the Northern Territory. Increased movements in to Palmerston-East Arm and Darwin Rural Areas over the past two Censuses (Taylor, 1989) may indicate an expansion of Darwin's residential hinterland. The ongoing provision of community services will need to take the regional spread of population into account.

#### 6.6. *Opportunities for Further Research*

This paper has provided an overview of some of the key patterns of interstate migration to and from the Northern Territory as recorded in the 1991 Census. There is a number of areas where this research could be expanded to provide further information about movements of the Northern Territory's population. Some of these areas are canvassed here, but the list is by no means exhaustive.

The analysis of movements to and from regions could be supplemented with an examination of intra-Territory movements. This may identify differences between male and female movers, as well as highlight regional shifts in population such as the move out of Darwin into surrounding regions. There is also a possibility that examining intra-state movement may provide more information about movement patterns of the Aboriginal population. Information about intra-Territory movements is only available for the 1986 to 1991 period, so short term movements within the Territory (1990 to 1991) could not be included in such an analysis.

This paper did not concern itself with movements in to the Northern Territory from overseas. The Census could not provide information about movements out of the Territory to overseas, but the volume of these may be estimated from overseas arrivals and departures data.

Some comparisons of 1991 data to data from previous Census was provided in this paper, but generally only as an indication of the continuation of previously observed trends. There was no detailed analysis of patterns over time because of the need to provide an overview of the 1991 situation here, and the problems involved in comparing data from previous Census (differently worded questions, response categories etc.). The historical nature of the key factors identified in this paper may be analysed by comparing results here with the work of Bell (1992), Taylor (1989), Maher and McKay (1986), and Rowland (1979).

There are obvious differences between movement patterns in to and out of the Northern Territory and patterns involving other States. A more detailed comparison exercise would further highlight differences, particularly different movement patterns of males and females, Aboriginal and non-Aboriginal people, and overseas born people. This paper has indicated the apparent uniqueness of the Northern Territory in relation to the movement patterns of these groups, and this could be supplemented with more detailed comparisons.

Only a limited analysis of movement characteristics of the Northern Territory's overseas born population was provided here. Other aspects of this population could be examined to provide a more complete picture of movement patterns. The year of arrival of overseas residents may indicate whether the Northern Territory has served as an

initial destination, or if it has served as a later destination for people arriving in other parts of Australia. Destinations of movers out of the Territory would provide more information about this group. A breakdown of the overseas born population into country of birth may also provide insights.

This paper has concerned itself with constant characteristics of movers : age (in the sense of birthdate being constant); gender; place of birth; and Aboriginality. An analysis of 'variable' characteristics is also possible. Information about occupation, qualifications, and so on can indicate the skills of movers. Some analysis could be provided on what sort of skills were held by people who had moved in to and out of the Territory, although this is highly problematic because skills may be obtained before or after the move from one State to another. Allowing for this issue, a skills analysis may provide circumstantial support for claims that the Northern Territory has been unattractive as a place of residence for high level managers and professionals (Taylor, 1989).

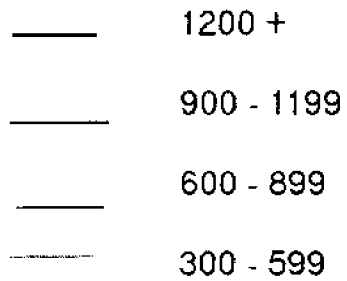
#### 6.7. *Implications for Population Estimation*

Estimates of population change in the Northern Territory must take into account the relatively young nature of the population, and the high level of turnover. The propensity of people to change address for Medicare, for example, may be affected by the short period of time they expect to reside in the Territory. The concentration of Australian Bureau of Statistics population estimates on movements of 1 - 14 year olds may not entirely account for the high rate of movement in by 20 to 29 year olds. The Bureau needs to monitor age specific movement patterns in particular for its estimates of total population. There may also be opportunities to investigate movement patterns of the Aboriginal population in more detail to assess issues such as Aboriginal interpretations of 'usual residence'.

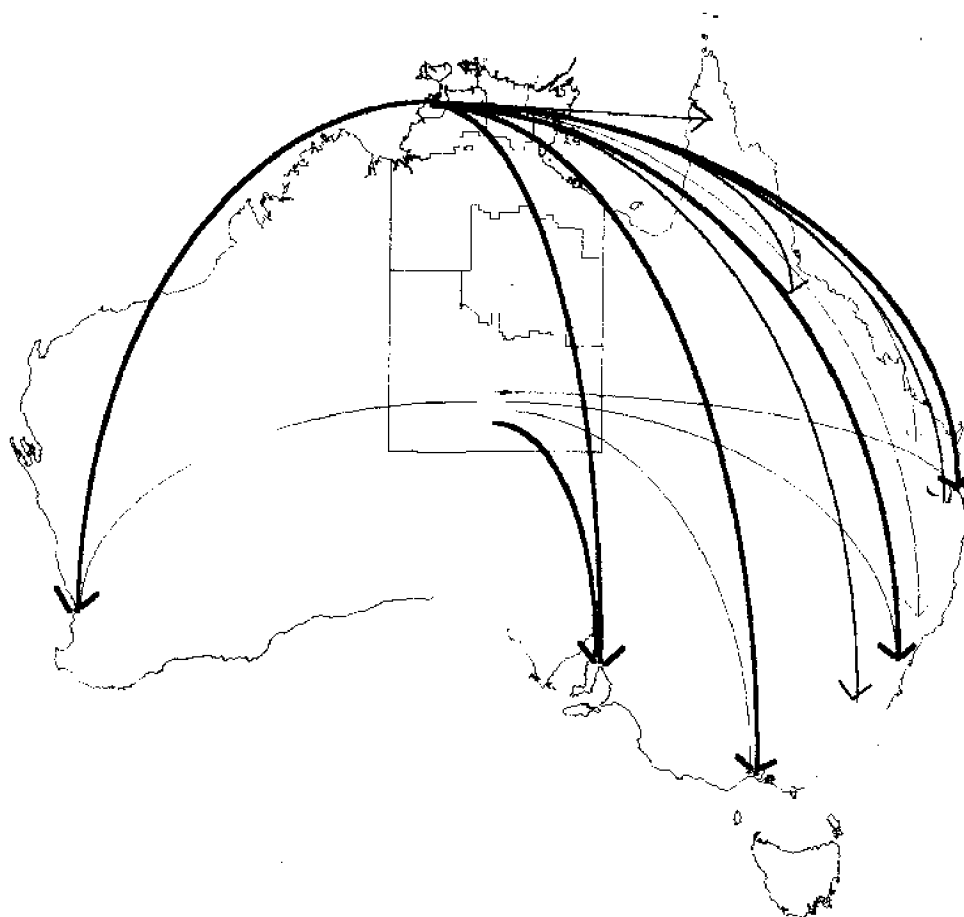
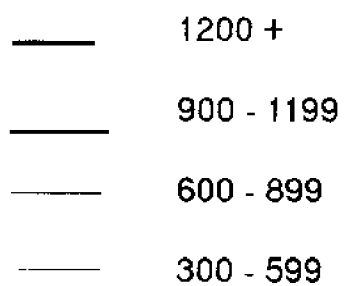
This paper has indicated that the Northern Territory population is highly mobile in comparison to other Australian States and the Australian Capital Territory. Bell (1992) observed that there has been a movement of population from south-eastern states to the north and west. The Northern Territory has not been part of this movement in to the north, and has instead provided flows out to Queensland, South Australia, and New South Wales. The Northern Territory has consistently experienced a high turnover of population, rather than increases in population (Bell, 1992; Taylor, 1989). This paper has indicated that the trends noted in previous studies were supported by data from the 1991 Census.

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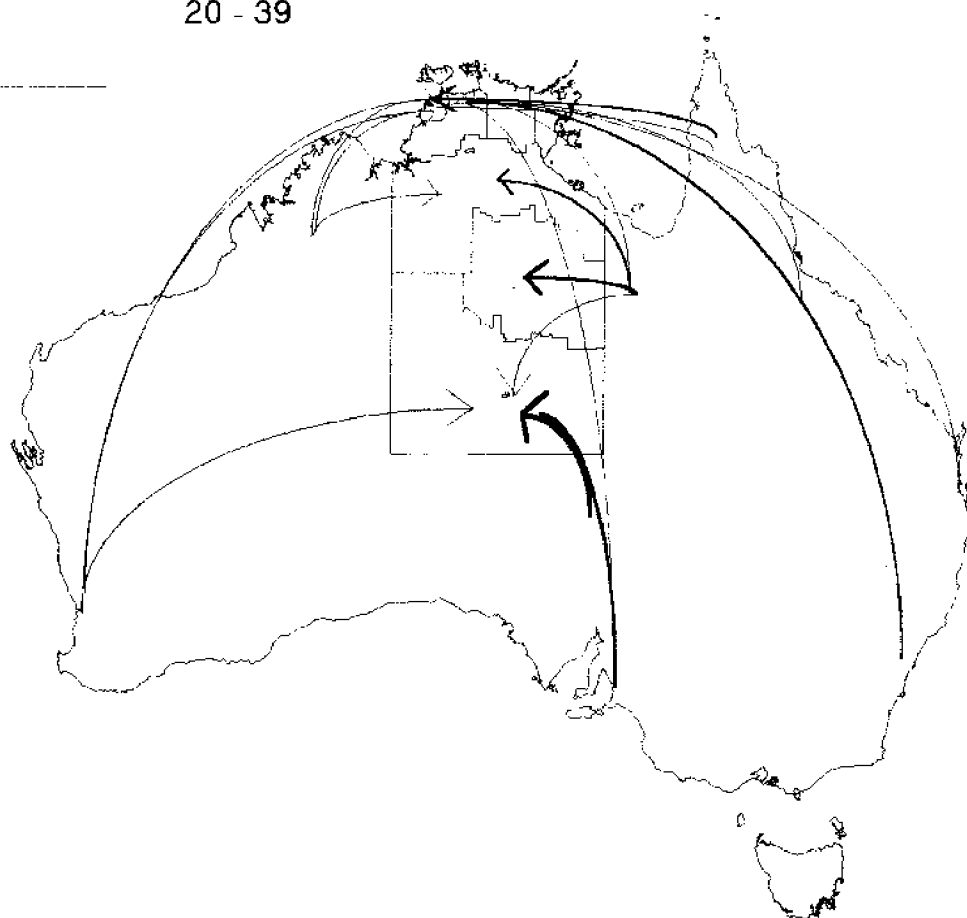
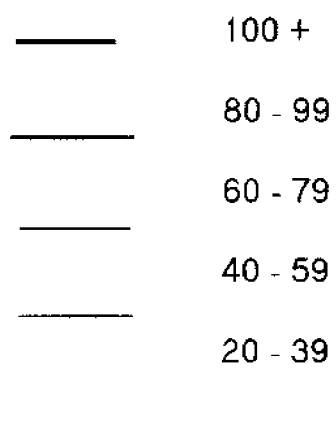
**APPENDIX 1: MAJOR MOVEMENT FLOWS IN TO AND OUT OF THE NORTHERN TERRITORY****MOVERS IN TO THE NORTHERN TERRITORY (1986 - 1991)**

# MOVERS OUT OF THE NORTHERN TERRITORY (1986 - 1991)





## ABORIGINAL MOVERS IN TO THE NORTHERN TERRITORY (1986 - 1991)



# ABORIGINAL MOVERS OUT OF THE NORTHERN TERRITORY (1986 - 1991)

