

'BRINGING THEM BACK HOME'

FACTORS INFLUENCING INTERSTATE MIGRATION TO AND FROM SOUTH AUSTRALIA

By

Graeme Hugo, Kevin Harris, Martin Bell, John Spoehr and Neil Coffee

Report Prepared for
Office of the Premier of South Australia
by The National Key Centre for Social Applications of
Geographical Information Systems
University of Adelaide

August 2000

TABLE OF CONTENTS

List	of Figures	V
List	of Tables	ix
Ackı	nowledgements	XV
Exec	cutive Summary	xvi
-	pter One: Bringing Them Back Home – Background and Strategic	es to
	pare the Report	1
1.1	Introduction Aims and Objectives	1
	Previous Studies	1
1.3	Secondary Data Sources	2 4
1.5	Primary Data Collection	7
1.6	Outline of the Study	10
1.0	outline of the study	10
Char	pter Two: The Context for the Study	
2.1	Introduction	11
2.2	Population Growth in South Australia	11
2.3	Mortality	14
2.4	Fertility	16
2.5	International Migration	22
2.6	Changing Age Structure	31
2.7	Projected Population Growth in South Australia	36
2.8	Conclusion	41
Chap	pter Three: Interstate Migration To and From South Australia	
3.1	Introduction	42
3.2	1	42
3.3	Annual Estimates of Recent Interstate Mobility	44
	3.3.1 Introduction	44
	3.3.2 The geography of interstate migration	45
	3.3.3 Migrant destinations	46
	3.3.4 Migrant origins	47
	3.3.5 Net migration	49
2.4	3.3.6 Summary	51
3.4	Demographic and Socio-Economic Aspects of Interstate	51
	Migration 1991-96 3.4.1 Introduction	51
	3.4.1 Introduction 3.4.2 Net migration, 1991-96	51
	3.4.3 Interstate movement, 1991-96	54 54
	3.4.4 Regional destinations	56
	3.4.5 Interstate moves to and from South Australian regions	58
	3.4.6 Summary	60
	control community	00

3.5	The Composition of Interstate Migration 1991-96	61
	3.5.1 Introduction	61
	3.5.2 Age and sex	61
	3.5.3 Household and family type	66
	3.5.4 Marital status	67
	3.5.5 Birthplace	68
	3.5.6 Labour force status	70
	3.5.7 Occupation	74
	3.5.8 Industry	75
	3.6.9 Qualifications	76
	3.5.10 Income	78
	3.5.11 Summary	79
3.6	Conclusion	81
-	pter Four: Patterns of Skilled Migration Interstate	
4.1	Introduction	82
4.2	Extent to Which South Australian Graduates Leave the State	82
4.3	Where Do South Australian Graduates Moving Interstate Go?	84
4.4	Qualifications of Outmigrants from South Australia	91
	4.4.1 Introduction	91
	4.4.2 University of South Australia alumni data	91
	4.4.3 Flinders University of South Australia Alumni	93
4.5	Summary	96
_	pter Five: Characteristics of South Australians Moving Interstate	0.0
5.1	Introduction	98
5.2	Age/Sex Profile of Persons Leaving South Australia	98
5.3	Family and Household Status	100
5.4	Employment Status	101
5.5	Housing Tenure	106
5.6	Conclusion	107
-	pter Six: Factors Influencing Outmigration From the State and Possible	
	urn Migration	100
6.1	Introduction Explaining Interested Microstics	108
6.2	Explaining Interstate Migration	108
6.3	Causes of Leaving South Australia	109
6.4 6.5	Degree of Attachment to South Australia Willingness to Poturn to South Australia	110 111
6.5 6.6	Willingness to Return to South Australia Paggons Why Migrants Would Paturn to South Australia	117
	Reasons Why Migrants Would Return to South Australia	117
6.7	Income Expectations of Returning Migrants	
6.8	Summary	120
-	pter Seven: The South Australian Labour Market and Its Influence on	
	estate Migration	101
7.1	Introduction Economic Transactor Drosports	121
7.2 7.3	Economic Trends and Prospects Labour Market Trends	122 123
1.3	Laudu Mainet Heilus	123

	7.3.1	Participation rates	123
	7.3.2	Employment change	125
	7.3.3	Males and females	127
	7.3.4	Changing composition of full-time/part-time employment	130
	7.3.5	Regional variations in the full-time/part-time composition	133
		of employment	
	7.3.6	Industry employment growth and decline	134
	7.3.7	Occupational employment growth and decline	145
	7.3.8	Public sector employment	149
	7.3.9	Underemployment	151
	7.3.10) Unemployment	153
7.4	Age P	Profile of the South Australian Workforce	156
	7.4.1	Introduction	156
	7.4.2	Age profile by industry	158
	7.4.3	Age profile by occupation	162
	7.4.4	Ageing of the State public sector	165
7.5	Incom	ne and Employment	166
	7.5.1	Introduction	166
	7.5.2	Household income and expenditure	167
	7.5.3	Average weekly earnings	172
	7.5.4	Average weekly earnings by industry sector	173
	7.5.5	Conclusion	177
7.6	Labou	or Mobility	178
	7.6.1	Introduction	178
	7.6.2	How many people are leaving and where are they going?	178
	7.6.3	How many people are coming to South Australia from other parts of Australia?	180
	7.6.4	Are we losing 'prime aged' people from South Australia?	180
	7.6.5	Why are people leaving?	181
	7.6.6	Why are people coming to South Australia?	184
	7.6.7	Which industries and occupations are people employed in after they leave?	184
	7.6.8	Are highly qualified and skilled people interstate?	185
7.7	-	oyment Vacancies	187
	7.7.1	Introduction	187
	7.7.2	Job vacancies and unemployment	187
	7.7.3	1 4	188
	7.7.4	Recent trends in skilled vacancies	194
	7.7.5	An alternative skilled vacancy index	198
7.8		Shortages in South Australia	201
	7.8.1	Introduction	201
	7.8.2	What is a skill shortage?	201
	7.8.3	Professions and information technology	203
	7.8.4	Skilled tradespersons	204
	7.8.5	•	204
	7.8.6	Responding to skills shortages	205
	7.8.7	Electronics industry skills audit	206
	7.8.8	Southern Adelaide Workplace Survey	207

	7.8.9 Overview of the skills in the South Australian automotive	209
	industry report	
	7.8.10 National context of job shortages	210
7.9	Conclusion and Policy Considerations	212
Chaj	pter Eight: Conclusions and Recommendations	
8.1	Introduction	215
8.2	The Justification for a Bringing Them Back Home Policy	215
8.3	Perceived Disadvantages of South Australia	217
8.4	Advantages of South Australia	218
8.5	Main Features of a Bringing Them Back Home Policy	220
8.6	South Australia: 'The Family Friendly' State	222
8.7	Linkages with International Migration	224
8.8	Conclusion	225
App	endices	226
Refe	erences	246

LIST OF FIGURES

Figure 1.1:	Internal Migration Questions in the 1996 Australian Census of Population and Housing	6
Figure 2.1:	Australia and South Australia: Rate of Population Growth per	12
Figure 2.2:	Annum, 1947-99 South Australia: Total Population Growth Showing the Natural	13
118010 2.2.	Increase and Net Migration Components, 1947-99	10
Figure 2.3:	Australia: Expectation of Life at Birth 1870-1998	15
Figure 2.4:	South Australia: Total Fertility Rate: 1845-1999	16
Figure 2.5:	South Australia: Female Labour Force Participation Rates by Age, 1911-2000	17
Figure 2.6:	Australia: Percent of Males and Females Aged 15-19 in Full-time Education, 1947-96	18
Figure 2.7:	South Australia: Number of Births and Abortions, 1970-98	18
Figure 2.8:	South Australia: Components of Population Change, 1947-54 to 1996-99	23
Figure 2.9:	Australia: Designated Areas Currently Attracting a Disproportionate Share of Incoming Migrants	25
Figure 2.10:	South Australia: Age and Sex Structure of the Population, 1961 to 1996 and Projected 2011	33
Figure 2.11:	South Australia: Actual and Projected Youth and Elderly Dependency Ratios, 1954-2051	34
Figure 2.12:	Australia and South Australia: Age and Sex Distribution of the Population, 1999 (preliminary)	35
Figure 2.13:	Projected Population, Australia	37
Figure 2.14:	Projected Population, Total South Australia	39
Figure 3.1:	Net Migration, South Australia, Annual Levels, 1990-91 to 1998-99	45
Figure 3.2:	Arrivals and Departures, South Australia, 1991-92 to 1998-99	45
Figure 3.3:	Net Interstate Migration Flows, Australia, 1996-99	46
Figure 3.4:	Departures from South Australia by State of Destination, 1991-92 to 1998-99	47
Figure 3.5:	Arrivals in South Australia by State of Origin	48
Figure 3.6:	Net Migration, South Australia	49
Figure 3.7:	Interstate Arrivals, Departures and Net Migration by Age and Sex, South Australia, 1991-96	62
Figure 3.8:	Net Interstate Migration by Age, South Australia, 1966-71 to 1991-96	63
Figure 3.9:	Contribution of Change in Arrivals and Departures to the Overall Shift in Net Interstate Migration Between 1986-91 and 1991-96, South Australia	65
Figure 3.10:	Net Interstate Migration by Birthplace Group, South Australia, 1991-96	69
Figure 4.1:	Interstate Destinations of South Australian Graduates, 1992, 1996 and 1999	84
Figure 4.2:	Sydney Metropolitan Area, Number of South Australian University Graduates Who Gained Employment by Postcode, 1992-99 Graduates	86

Figure 4.3:	Melbourne Metropolitan Area, Number of South Australian	87
	University Graduates Who Gained Employment by Postcode, 1992-99 Graduates	
Figure 4.4:	Brisbane Metropolitan Area, Number of South Australian	88
	University Graduates Who Gained Employment by Postcode, 1992-99 Graduates	
Figure 4.5:	Postcode of Interstate Movers, Alumni Respondent Group	90
Figure 4.6:	Graduates with Health Qualifications from Flinders University	95
Figure 6.1:	Persons Aged 15 Years and Over: Proportion of Persons who Changed Usual Residence by Reason for Moving and Type of Move, Year Ended 31 May 1987	109
Figure 7.1:	Participation Rates, Trend, South Australia, Australia, Males and Females, June 1990 to June 2000	124
Figure 7.2:	Participation Rates, Trend, South Australia, Australia, Persons, June 1990 to June 2000	125
Figure 7.3:	Employed Persons, Australia and South Australia, Full-time and Part-time as a Percentage of Total Employment, All Persons, 1980-2000	130
Figure 7.4:	Employed Persons, Australia and South Australia, Full-time and Part-time as a Percentage of Total Employment, Males, 1980-2000	131
Figure 7.5:	Employed Persons, Australia and South Australia, Full-time and Part-time as a Percentage of Total Employment, Females, 1980-2000	132
Figure 7.6:	Employment Change by Industry, South Australia, Persons, 1990-2000	135
Figure 7.7:	Employment Change by Industry, South Australia, Part-time and Full-time, Persons, 1990-2000	137
Figure 7.8:	Employment by Industry, South Australia, Males, Full-time and Part-time, 1990-2000	140
Figure 7.9:	Employment by Industry, South Australia, Females, Full-time and Part-time, 1990-2000	143
Figure 7.10:	Employees in the South Australian Public Sector by Appointment Type, Percent, June 1995 to June 1999	150
Figure 7.11:	Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, All Persons, 1980-99	151
Figure 7.12:	Unemployment Rate, Trend, South Australia and Australia, Males and Females, June 1981-June 2000	154
Figure 7.13:	Unemployment Rate, Trend, South Australia and Australia, June 1981-June 2000	155
Figure 7.14:	Employment by Age, South Australia, Males and Females, 000s, 1986	157
Figure 7.15:	Employment by Age, South Australia, Males and Females, 000s, 1996	157
Figure 7.16:	South Australian Industry by Proportion of Employees by Age Groups, 1999-2000 Financial Year	159
Figure 7.17:	Employment by 2 Digit Industry and Age, Selected Industries, South Australia, 1999-2000 Financial Year Average	160
Figure 7.18:	Employment by Selected Occupation and Age, South Australia, 1999-2000 Financial Year Average, Selected Age Groups	164

Figure 7.19:	Employment by Occupation and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees	165
Figure 7.20:	Employees in the South Australian Public Sector by Age and Gender, June 1999	166
Figure 7.21:	Percentage Change in Average Household Income, by State and Region, 1991 to 1996	168
Figure 7.22:	Percentage Increase in Average Weekly Household Income by all States, Australia, 1993-94 to 1998-99	170
Figure 7.23:	Percentage Increase in Average Weekly Household Expenditure by All States, Australia, 1993-94 to 1998-99	170
Figure 7.24:	Average Weekly Household Income by Dollars by All States, Australia, 1993-94 and 1998-99	171
Figure 7.25:	Ratio of South Australian to Australian Average Weekly Ordinary Time Earnings, Seasonally Adjusted, Dollars, 1983-2000	172
Figure 7.26:	Average Weekly Earnings by Industry Sector, South Australia and Australia, Dollars, May 2000	184
Figure 7.27:	Average Weekly Earnings by Industry, South Australia and Australia, All Persons, Percentage Change, May 1994 to May 2000	176
Figure 7.28:	Increase in Weekly Earnings by Industry, South Australia and Australia, All Persons, May 1994 to May 2000	177
Figure 7.29:	Persons in the Labour Force Leaving South Australia by Number by State Where Now Employed, 1994-98	179
Figure 7.30:	Age of Persons Leaving South Australia, Persons, 1994-98	181
Figure 7.31:	Reasons for Leaving South Australia, 1994, Percent of Total Persons	182
Figure 7.32:	Reasons for Leaving South Australia, 1996, Percent of Male Persons	183
Figure 7.33:	Reasons for Leaving South Australia, 1998, Percent of Female Persons	183
Figure 7.34:	Qualifications of People Leaving South Australia by Number, 1994-98	186
Figure 7.35:	Employment Vacancies and Unemployment, South Australia, April 1990 to April 2000	189
Figure 7.36:	ABS Job Vacancy Rates, South Australia and Australia, May 1995 – May 2000	190
Figure 7.37:	ABS Job Vacancy Rates, Selected States and South Australia, May 1995 – May 2000	91
Figure 7.38:	Skilled Vacancy Index, Australia and South Australia, 1991-2000	191
Figure 7.39:	Skilled Vacancy Index, Selected States, Territories and South Australia, 1991-2000	192
Figure 7.40:	Ratio of Persons Unemployed to Job Vacancies, South Australia, New South Wales, Victoria, Queensland, 1990–99	192
Figure 7.41:	Average Monthly Skilled Job Vacancies 1995-2000 by Number, Professionals, Paraprofessionals, Tradespersons by New South Wales, Victoria, Queensland, Northern Territory and South Australia	193
Figure 7.42:	Percentage of Total Vacancies by Professional Vacancies, Paraprofessional Vacancies, Trades Vacancies, South Australia and Selected States and the Northern Territory, First Quarter 2000	195

Average Monthly Job Vacancies by Selected Occupations, South	197
Australia, 1995-2000	
Average Monthly Skilled Job Vacancies by Occupation as a	198
Proportion of Total Skilled Vacancies, New South Wales,	
Victoria, Queensland, Northern Territory and South Australia,	
1995-2000	
Vacancies per Thousand Persons Employed in SVS Professional	200
Occupations, South Australia by Selected States, May Quarter	
2000	
Vacancies per Thousand Persons Employed in SVS Trades	201
Occupations, South Australia and Selected States, May Quarter	
2000	
	Australia, 1995-2000 Average Monthly Skilled Job Vacancies by Occupation as a Proportion of Total Skilled Vacancies, New South Wales, Victoria, Queensland, Northern Territory and South Australia, 1995-2000 Vacancies per Thousand Persons Employed in SVS Professional Occupations, South Australia by Selected States, May Quarter 2000 Vacancies per Thousand Persons Employed in SVS Trades Occupations, South Australia and Selected States, May Quarter

LIST OF TABLES

Table 1.1:	Adelaide University Enrolments, by Home Postcode, 2000	7
Table 2.1:	Australian States and Territories: Population Change in the	12
	Twelve Months to December 30, 1999	
Table 2.2:	Australian States and Territories, Change in Population Growth	13
	Rates Between 1995-96 and 1998-99	
Table 2.3:	Proportion of the Population with Disabilities and Handicaps	15
Table 2.4:	Net Overseas Immigration, Total Australia and South Australia,	23
	1966-99	
Table 2.5:	Distribution of Migrants Granted Visas Under State Specific Migration Mechanisms in 1998-99 and 1999-2000	27
Table 2.6:	Intended State of Residence of Settler Arrivals, 1989-99	29
Table 2.7:	South Australia: Summary Measures of Age and Sex Composition	32
1 4010 2.7.	1911-96, Preliminary Figures 1999 and Projected Measures	32
	2001-31	
Table 2.8:	Australian States and Territories: Percentage of Population Aged	36
1.0010 2.00	65 and Over, 1971, 1981, 1991 and 1996	
Table 2.9:	Projected Population, Varying Component Levels – Australia	37
Table 2.10:	ABS Population Projections Assumed Net Interstate Migration	38
	from South Australia 1998-2051	
Table 2.11:	Projected Population, Varying Component Levels – Total South	39
	Australia	
Table 2.12:	South Australia: Projected Growth of 65+ Population, Series II	40
	Projection	
Table 3.1:	Australian Net Interstate Migration of the Australian Born	43
	(1881-1971) and the Total Population (1966-96)	
Table 3.2:	Estimated Net Interstate Migration, States and Territories,	44
	Australia, 1981-82 to 1998-99	
Table 3.3:	Departures from South Australia, Destinations, 1991-92 to	47
	1998-99	
Table 3.4:	Arrivals in South Australia by State, 1991-92 to 1998-99	48
Table 3.5:	Net Migration, South Australia, 1991-92 to 1998-99	49
Table 3.6:	Net Interstate Migration by State, 1993-99	50
Table 3.7:	Interstate Migration, 1996-99 and 1998-99	51
Table 3.8:	Net Interstate Migration by State and Territory, South Australia,	53
	1966-71 to 1991-96	
Table 3.9:	Interstate Migration Flows, Rates and Effectiveness, by Source	55
	and Destination, South Australia, 1986-91 and 1991-96	
Table 3.10:	Regional Origins and Destinations: Arrivals, Departures and Net	57
	Migration, South Australia, 1986-91 and 1991-96	
Table 3.11:	Arrivals, Departures and Net Interstate Migration, Statistical	59
	Divisions of South Australia, 1986-91 and 1991-96	
Table 3.12:	Net Interstate Migration by Source and Destination, Statistical	59
	Division of South Australia, 1986-91 and 1991-96	
Table 3.13:	Interstate Arrivals, Departures and Net Migration by Age and Sex,	62
	South Australia, 1991-96	
Table 3.14:	Interstate Arrivals and Departures by Age, South Australia,	64
	1986-91 and 1991-96	

Table 3.15:	Interstate Arrivals, Departures and Net Migration by Family and	67
	Household Type, South Australia, 1986-91 and 1991-96	
Table 3.16:	Interstate Arrivals, Departures and Net Migration by Marital	68
	Status, People Aged 15 and Over, South Australia, 1986-91 and	
Table 2 17.	1991-96 Not Interested Microstica by Birthalone and Boried of Bosidenes	60
Table 3.17:	Net Interstate Migration by Birthplace and Period of Residence,	69
Toble 2 10.	South Australia, 1981-86, 1986-91 and 1991-96	70
Table 3.18:	Net Interstate Migration by Labour Force Status, People Aged 15 and Over, South Australia, 1976-81 to 1991-96	70
Table 3.19:	Arrivals, Departures and Net Interstate Migration by Labour Force	71
1 aute 3.19.	Status, People Aged 15 and Over, South Australia, 1991-96	/ 1
Table 3.20:	Arrivals, Departures and Net Interstate Migration by Labour Force	72
1 doic 3.20.	Status, People Aged 15 and Over, South Australia, 1991-96	12
Table 3.21:	Net Interstate Migration by Labour Force Status and	72
14010 0.21.	Origin/Destination, People Aged 15 and Over, South Australia,	
	1986-91 and 1991-96	
Table 3.22:	Arrivals, Departures and Net Interstate Migration by Occupation,	74
	People Aged 15 and Over in the Employed Workforce, South	
	Australia, 1991-96	
Table 3.23:	Net Interstate Migration by State or Territory and Occupation,	75
	People Aged 15 and Over in the Employed Workforce, South	
	Australia, 1991-96	
Table 3.24:	Arrivals, Departures and Net Interstate Migration by Industry,	76
	People Aged 15 and Over in the Employed Workforce, South	
	Australia, 1991-96	
Table 3.25:	Arrivals, Departures and Net Interstate Migration by	77
	Qualifications, People Aged 15 and Over, South Australia,	
	1991-96	
Table 3.26:	Net Interstate Migration by Age and Qualifications, People Aged	78
	15 and Over, South Australia, 1991-96	
Table 3.27:	Arrivals, Departures and Net Interstate Migration by Income,	78
T 11 2 20	Persons Aged 15 and Over, South Australia, 1991-96	5 0
Table 3.28:	Net Interstate Migration by Age and Income, South Australia,	79
T 11 41	1991-96	0.2
Table 4.1:	Destination of Graduates from Australian Universities in 1999	83
Table 4.2:	Percentage of SA and NSW Graduates Moving Interstate on	83
Table 4.2.	Graduation Destinations of Interestate Migrants in the Self Naminoted Sample	89
Table 4.3:	Destinations of Interstate Migrants in the Self-Nominated Sample, 2000	89
Table 4.4:	Interstate Relocation, Alumni Respondent Group, 2000	89
Table 4.4.	University of South Australia Graduates by Field of Study and	92
1 able 4.3.	Current State, 1990 to 2000	92
Table 4.6:	Fields of Studies with More Than 10 Graduates Locating in New	92
1 4010 4.0.	South Wales, 1990-2000) _
Table 4.7:	Fields of Studies with More Than 10 Graduates Locating in	93
14010 1.7.	Queensland, 1990-2000	,,
Table 4.8:	Fields of Studies with More Than 10 Graduates Locating in	93
	Victoria, 1990-2000	, 0
Table 4.9:	Flinders University of South Australia Graduates by Field of	94
	Study and Current State. 1994 to 1999	

Table 4.10:	Fields of Studies with More Than 10 Graduates Locating in New South Wales, 1994-99	95
Table 4.11:	Fields of Studies with More Than 10 Graduates Locating in	96
14016 4.11.	Queensland, 1994-99	90
Table 4.12:	Fields of Studies with More Than 10 Graduates Locating in	96
10010 11121	Victoria, 1994-99	, ,
Table 5.1:	Age/Sex Profile of Graduates Obtaining Work Interstate, 1992,	99
	1996 and 1999	
Table 5.2:	Present Age/Sex Distribution of the Self-Nominated Sample, 2000	99
Table 5.3:	Present Age/Sex Distribution of the Alumni Sample, 2000	100
Table 5.4:	Family Type When Left South Australia and at Time of Interview,	100
	Alumni Respondent Group	
Table 5.5:	Family Type When Left South Australia and at Time of Interview,	101
	Self-Nominated Sample	
Table 5.6:	Employment Status at Time of Leaving South Australia, Alumni	102
	and Self-Nominated Respondents	
Table 5.7:	How Has Employment Status Changed Since Leaving South	103
	Australia	
Table 5.8:	Occupation Structure of Self-Nominated and Alumni Groups	103
Table 5.9:	Salary on Leaving South Australia	104
Table 5.10:	Salary of Migrants Before and After Migration	105
Table 6.1:	Reasons for Leaving South Australia	110
Table 6.2:	Willingness to Return Among Former South Australian Residents	111
Table 6.3:	Age of Respondents by Intention to Return to South Australia	112
Table 6.4:	Intention to Return by Sex	113
Table 6.5:	Current Occupation of Persons Expecting to Return to South Australia	114
Table 6.6:	Current Income Levels of Persons Expecting to Return to South	115
1 4010 0.0.	Australia	113
Table 6.7:	Expected Occupation of Those Expecting to Return to South	116
	Australia	
Table 6.8:	Expected Remuneration Level of Those Expected to Return to	116
	South Australia	
Table 6.9:	Reasons for Wanting to Return to South Australia	117
Table 6.10:	Reasons for Not Returning to South Australia	118
Table 6.11:	Current Salary Compared with Expected Salary for Those	119
	Expecting to Return to South Australia	
Table 7.1:	Participation Rates, Trend, South Australia, Australia, Males,	124
	Females and Persons, June 1981 to June 2000	
Table 7.2:	Change in Employment by Employment Status, Australia, States	126
	and Territories, All Persons, 1980-90 and 1990-2000	
Table 7.3:	Employed Persons by Full-time and Part-time, Males and	127
	Females, South Australia, 1990-2000	
Table 7.4:	Change in Employment by Employment Status, Australia, States	128
	and Territories, Females, 1980-90 and 1990-2000	
Table 7.5:	Change in Employment by Employment Status, Australia, States	129
	and Territories, Males, 1980-90 and 1990-2000	
Table 7.6:	Employed Persons, Australia and South Australia, Full-time and	131
	Part-time as a Percentage of Total Employment, All Persons,	
	1980-2000	

Table 7.7:	Employed Persons, Australia and South Australia, Full-time and	132
Table 7.8:	Part-time as a Percentage of Total Employment, Males, 1980-2000 Employed Persons, Australia and South Australia, Full-time and	132
	Part-time as a Percentage of Total Employment, Females, 1980-2000	
Table 7.9:	Part-time Employment, Australia, States and Territories, 1980-2000, as a Percentage of Total Employment, Females	133
Table 7.10:	Part-time Employment, Australia, States and Territories, 1980-2000, as a Percentage of Total Employment, Males	133
Table 7.11:	Employment by Industry, South Australia, Persons, 1990-2000	134
Table 7.12:	Employment by Industry, South Australia, Full-time Employed Persons, 1990-2000	136
Table 7.13:	Employment by Industry, South Australia, Part-time Employed Persons, 1990-2000	138
Table 7.14:	Employment by Industry, South Australia, Males, 1990-2000	139
Table 7.15:	Employment by Industry, South Australia, Full-time, Males, 1990-2000	141
Table 7.16:	Employment by Industry, South Australia, Males, Part-time, 1990-2000	141
Table 7.17:	Employment by Industry, South Australia, Females, 1990-2000	142
Table 7.18:	Employment by Industry, South Australia, Females, Full-time, 1990-2000	144
Table 7.19:	Employment by Industry, South Australia, Females, Part-time, 1990-2000	145
Table 7.20:	Employment Change by Occupation (2 Digit ASCO), Persons, Males and Females, 1997-2000	147
Table 7.21:	Employment Change by Occupation, Full-time and Part-time, Males and Females, 1997-2000	148
Table 7.22:	State Public Sector Employment, South Australia, 1986-99, Persons	149
Table 7.23:	Employees in the South Australian Public Sector by Appointment Type, Percent, June 1999 to June 1999	150
Table 7.24:	Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, All Persons, 1980-99	152
Table 7.25:	Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, Females, 1980-99	152
Table 7.26:	Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, Males, 1980-99	153
Table 7.27:	Unemployment Rate, Trend, South Australia and Australia, Male, Female and Persons, June 1981-June 2000	154
Table 7.28:	Unemployment Rate, Australia and States, June 1980 to June 2000	155
Table 7.29:	Employment by Age, Males and Females, South Australia, 1986-96	158
Table 7.30:	Employment by Industry and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees	159

Table 7.31:	Employment by 2 Digit Industry and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees and Selected Proportions	161
Table 7.32:	Employment by Occupation and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees	162
Table 7.33:		
Table 7.34:	Employees in the South Australian Public Sector by Age and Gender at June 1999	165
Table 7.35:	Estimated Average Household Income by State and Region in 1996 and Real Change Since 1991	167
Table 7.36:	Percentage Increase in Average Household Weekly Expenditure and Average Household Weekly Income, States and Australia, 1993-94 to 1998-99	169
Table 7.37:	Average Weekly Household Income by Dollars by All States, Australia, 1993-94 and 1998-99	171
Table 7.38:	Average Weekly Household Expenditure by Dollars by All States, Australia, 1993-94 and 1998-99	171
Table 7.39:	Ratio of Full-time Adult Ordinary Time Earnings, South Australia by Australia	173
Table 7.40:	Average Weekly Earnings by Industry South Australia and Australia by Dollar Difference and Percentage Change, May 1994 to May 2000	175
Table 7.41:	Persons in the Labour Force Leaving South Australia by Number by State Where Now Employed, 1994-98	179
Table 7.42:	Persons Moving to South Australia From Other Parts of Australia, 1994, 1996 and 1998	180
Table 7.43:	Age of Persons Leaving South Australia, Persons, 1994-98	180
Table 7.44:	Reasons for Leaving South Australia by Persons, 1994-98	182
Table 7.45:	Reasons for Leaving Job Before Moving to South Australia	184
Table 7.46:	People Leaving South Australia by Industry Sector, Persons, 1994-96	185
Table 7.47:	Occupations of Persons Leaving South Australia by Number, 1994, 1996 and 1998	185
Table 7.48:	Qualifications of People Leaving South Australia by Number, 1994-98	186
Table 7.49:	Unemployment by Major Occupational Group by '000 Persons, South Australia, May 2000	187
Table 7.50:	Unemployed Persons with a Post-school Educational Qualification by Field of Study, May 1999	188
Table 7.51:	Employment Vacancies and Unemployment, South Australia, April 1990 to April 2000	189
Table 7.52:	Ratio of Persons Unemployed to Job Vacancies, South Australia, New South Wales, Victoria, Queensland, 1990 –99	193
Table 7.53:	Average Monthly Skilled Job Vacancies, Broad Occupational Categories, New South Wales, Victoria, Queensland, Northern Territory and South Australia, 1995-2000	194

Table 7.54:	Average Monthly Skilled Vacancies by State, Proportion of Total	
	Vacancies by Professional, Paraprofessional and Trades	
	Categories, March Quarter 2000	
Table 7.55:	Average Monthly Skilled Job Vacancies by Selected Occupations,	196
	New South Wales, Victoria, Queensland, Northern Territory and	
	South Australia, 1995-2000	
Table 7.56:	Vacancies per Thousand Persons Employed in SVS Occupations,	199
	South Australia by Selected States, May Quarter 2000	
Table 7.57:	Skills Shortages in the Professions and Information Technology,	203
	South Australia, September, 1999	
Table 7.58:	Shortages in the Trades, South Australia, 1999	204
Table 7.59:	Skill Shortages in the Southern Adelaide, 1999-2000	208
Table 7.60:	Skill Shortages in the Passenger Motor Vehicle Industry	209
Table 7.61:	Skill Shortages - IT and T Specialisations, September 1999	210
Table 7.62:	Skill Shortages – Professional Occupations, September 1999	211
Table 7.63:	Skill Shortages – Trades January 2000	212

ACKNOWLEDGEMENTS

This Report is the result of the work of many people. Overall management of the project has rested with Kevin Harris, Manager of the Key Centre for Social Applications of Geographical Information Systems. Kevin Harris wrote the sections of the report based on ABS quarterly estimates of interstate migration, the graduate destination surveys, the analysis of alumni fields of study and the analysis of returns from the self nominated survey group. Martin Bell provided a detailed analysis of interstate migration to and from South Australia based on 1996 census data, which was complemented by work recently published by Martin Bell and Graeme Hugo. Neil Coffee, Lecturer in the Key Centre, formerly State demographer at Planning SA, completed the analysis of the alumni survey results, while John Spoehr, Director of the Centre for Labour Studies at Adelaide University prepared the detailed analysis of the South Australian labour market. Graeme Hugo, Director of the Key Centre, took overall responsibility for melding the work of these contributors into a coherent whole.

Data critical to this Report were provided by the Lauren Huefner, Adelaide University Alumni Association, Troy Shiels, Alumni Association of the University of South Australia, Tanya Thamm, Flinders University Alumni Association, and Bruce Guthrie, Graduate Careers Council of Australia

John Braendler analysed information obtained by the Premier's Department from the 1800 telephone calls and emails made to the Bringing them back home website. He also tabulated the results from the more than 500 responses to the Bringing them back home survey. Margaret Young provided analyses of these results using SPSS. Paul Martin and Denis Hart, each from the Department of Employment Workplace Relations and Small Business, Geoff Colton, from the ABS, and Lou Wilson and Luke Oswald provided research to John Spoehr in his work for the project.

Nina Alexoudis and Joanna Rillo helped to type and assemble the finished product, under the guidance of Janet Wall, Research Assistant for Graeme Hugo. The cover was designed by Chris Crothers in the Department of Geographical and Environmental Studies at Adelaide University.

EXECUTIVE SUMMARY

Introduction

In May 2000 the National Key Centre for Social Applications of Geographical Information Systems¹, based at the Adelaide University, was contracted by the Office of the South Australian Premier to produce a Report aimed at developing initiatives which could work to attract interstate skilled workers to South Australia and South Australian university graduates presently working interstate back to the State. The Terms of Reference were to

- . .
- (A) Identify in detail the patterns of interstate migration to and from South Australia for the past six years
- (B) Identify the factors driving interstate migration to and from South Australia
- (C) Identify strategies aimed at increasing the number of skilled interstate migrants coming to South Australia
- (D) Identify strategies aimed at attracting university graduates who have left the State back to South Australia
- (E) Identify regions to be targeted for the strategies identified above.

Policy initiatives by Governments to encourage expatriates to return home are a recent phenomenon. In the United States, Iowa has developed policies based around the theme 'Iowa: the smart career move'. Its campaign has been particularly aimed at young professionals who left the state in the 1980s, many of whom are now young adults beginning to rear children. Former Iowans have been contacted through official receptions held in New York, Los Angeles, San Diego and Chicago, cities to which many young Iowans had migrated. Contact has also been made through a website detailing new job opportunities created in Iowa and through letters to 25,000 people on alumni lists held by universities. A similar strategy has been developed in Minnesota, whose theme is 'Come Home to Minnesota'. The strategy has economic and demographic aims, and has involved the development of a jobs database on the Internet, targeting young adults and their families principally through the use of alumni lists.

This Executive Summary, together with Chapter Eight, provides an overview of the Report, its findings and recommendations. Detailed analyses documenting the material presented in the Executive Summary and Chapter Eight are contained in the intervening chapters.

Methodology

The Report has relied on data from secondary and primary sources. Secondary data were obtained from ...

- Census Internal Migration Data
- ABS Quarterly Estimates of Interstate Migration

¹ The National Key Centre is an ARC Key Centre for Teaching and Research. Its Core Partners are Adelaide University, the Flinders University of South Australia, the University of South Australia, the Department for Transport Urban Planning and the Arts, the Department of Environment and Heritage, and the Australian Bureau of Statistics

- Graduate Careers Council of Australia Graduate Destination Survey
- Alumni Association of Flinders University of South Australia and the University of South Australia

In May 2000, the State Government established a 1800 telephone number, and a website, for people interested in the 'Bringing Them Back Home' campaign to register that interest.

- The 1800 number and the website received 233 calls and emails, and these people were surveyed during July.
- A further 574 graduates from Flinders University of South Australia and Adelaide University were also surveyed.

These respondents provided the primary data sources for the Report.

The South Australian Demographic Context

Chapter Two seeks to establish a demographic context for the study. Although the Report, and the State Government, is primarily concerned with interstate migration events which have occurred during the previous six years, it is important that any interpretations are made against the South Australian demographic background which has developed during in the post World War II period. A number of key points emerge from this analysis ...

- During the long boom of the fifties and sixties, South Australia's growth rate exceeded that for Australia.
- After the long boom, population growth rates generally began to trend downwards, and more significantly, South Australia's rate of population growth became less than that for Australia.
- From a peak in the early sixties, natural increase has steadily reduced, reflecting the role of birth control, changed attitudes to marriage and family size and increased female participation in the workforce.
- levels of net migration have fluctuated, reflecting changing Government attitudes to the size of the intake.
- Significantly, the choice of South Australia as a destination for international migrants since 1970 has declined markedly.
- At the end of the sixties, one in every ten international migrants settled in South Australia, but by 1999 the number had declined to less than three in every 100.
- For most of the nineties, international migration's contribution to South Australian population growth has been less than that for natural increase.
- There has been a convergence between the contribution of natural increase and international migration to SA population growth in recent years, partly due to the State Specific Migration Mechanisms introduced by Department of Immigration and Multicultural Affairs (DIMA).
- However, retention of these migrants is another matter, and if opportunities for these migrants are not maintained within the State, the probability is high that these recent arrivals will join the interstate migration stream.
- Queensland, Western Australia and the Northern Territory currently have the highest population growth rates in Australia. South Australia has the lowest growth rate, while Tasmania has experienced negative growth in the 12 months to December 1999.
- In 1998-99 South Australia's population growth rate compared with that for 1995-96 was 11.1 percent higher. All other states, except Victoria and New South Wales, reported lower growth rates in 1998-99 than were reported in 1995-96.

With specific reference to interstate migration, in the period 1947 to 1961, South Australia experienced net interstate in-migration, fuelled by post war economic expansion. Subsequently, net interstate out-migration from South Australia occurred until 1971, with net interstate in-migration again prevailing in the five years to 1976. However, since then net interstate out-migration has been a characteristics feature for South Australia. The important point, therefore, is that net out-migration should not be seen as 'abnormal' but as the norm. Net in-migration has been a rare phenomenon of the demography of South Australia during the last 50 years. In this context, it would be extremely expensive to attempt to turnaround the prevailing situation. However, this Report will present options that have the potential to make considerable inroads into the size of net out-migration levels from South Australia.

It is clear that since 1994-95, there has been a form of turnaround to net interstate migration from South Australia, in the sense that the magnitude of net out-migration has decreased by more than 50 percent to 1998-99. Moreover, there has been a turnaround in the level of net interstate out-migration to New South Wales, Queensland and the ACT, net in-migration from Tasmania and the Northern Territory during the last five years, coupled with rising net out-migration to Victoria. It is expected that some of the policies advocated in this Report can work to further reduce the size of South Australia's annual net out-migration levels to various states, and increase levels on net in-migration from others.

The Report promotes the introduction of low cost measures that do not seek to compete with Sydney and Melbourne. Among these measures is a push to attract to South Australia people in the 30 plus age group, who may have young families and are considering education opportunities for their children, who are seeking the lifestyle attractions South Australia has to offer, from low housing costs to ease of accessibility to clean environment, who are prepared to accept some level of trade-off between eastern states levels of income and lower costs of living available in South Australia. Making South Australia increasingly attractive to this demographic group can be achieved through policies designed to make South Australia a family friendly state. Policies of this kind would continue the South Australian tradition of being at the forefront of social, equity and anti-discrimination initiatives. Family friendly policies would help to stabilise fertility levels, and in the process support the 'Bringing Them Back Home' program. If policies of this kind worked to reduce the extent of out-migration from South Australia, further spin off benefits would accrue, including the possibility of an increased share of the international migration stream to Australia.

Population projections prepared by the Australian Bureau of Statistics indicate that South Australia's growth rate and median age are likely to trend considerably lower than that for Australia as a whole. The most optimistic prediction of South Australia's population growth to 2051 is 0.08 percent, compared with 0.43 percent for Australia. Less optimistic projections suggest negative rates of population growth, at levels considerably lower than those predicted for Australia

The Report takes the position that any introduction of family friendly policies affords the State the opportunity to modify some of the population, population growth and median age trends predicted in the most recent ABS population predictions.

Selectivity and Interstate Migration

Chapters Three, Four and Five provide an exhaustive analysis of secondary interstate migration data for South Australia relating to the nineties, as well as survey results derived from the 'self nominated' and Adelaide and Flinders Alumni samples.

It is recognised that interstate migration is age selective, especially for migrants aged 20-24 years. This has been a characteristic feature of interstate migration from 1966, and the numbers in this age group migrating interstate have been increasing from one census to the next. In the 1991-96 period there was a shift to the right on the cohort structure – that is, the predominant age of interstate migrants increased to 25-29 years, with the number of interstate migrants aged 20-24 years relegated to second position.

In the 20-24 years age group, there are more females than males leaving the State. However, among migrants aged between 25 and 59, there are typically fewer females than males moving interstate. Beyond 60 years, numbers are balanced, except in the 75 years and greater age group, where female migrants exceed males.

These findings were verified with primary data obtained from the survey, in which 72 percent of the self nominated group were in the age group 20-29 years, compared with 58 percent for the Alumni group. Between the two groups, 62 percent of out migrants were aged between 20 and 29 years at the time of leaving South Australia.

Other aspects of selectivity associated with interstate migration include ...

- Major losses of couple families with and without children, singles and group households. Couple family loss increased in 1990s.
- Overseas-born are disproportionately represented among out migrants.
- Employed workers, especially the young among out-migrants.
- Unemployed among in-migrants.
- High level occupations (professionals, para professionals, managers) among outmigrants.

There is also strong evidence that the interstate migration process causes a 'brain drain' from South Australia, as well as a drain of high income earners. The proportion of persons with degree and diploma qualifications in the migration stream leaving South Australia is considerably higher than the proportions in the South Australian population. In terms of migrant income, more persons with relatively high income leave the State than arrive. Therefore, high levels of net out-migration have a significant impact on the State, and policies aimed at reducing the level of net out-migration will also have a favourable economic impact in terms of skill levels retained in the state and the spending power of the state's population.

Within the graduate stream of interstate migrants, there is selectivity in terms of the skills and training that predominates among graduates. Selected specialisations are in higher demand than others in the interstate labour markets. Based on data from the Graduate Careers Council of Australia annual surveys of graduates from South Australian universities, it is clear that South Australian graduates from specialisations such as education, business studies, and nursing develop a greater propensity to move interstate than do graduates from other fields.

Reasons for Leaving South Australia

The survey of the 'self nominated' and alumni groups sought information about a range of demographic and socio-economic characteristics, their reasons for leaving South Australia, and what changes would need to occur, both with them and within South Australia, for them to contemplate a return to the State.

The strongest reasons provided for leaving the State related to employment prospects. It follows, then, that these factors will be prominent in any decision making process the migrants undertake in deciding whether to return to South Australia.

Of particular interest in this Report is the identification of the size of any group of former residents who might want to return to South Australia. Accordingly, the survey sought respondents' views on matters which related to a possible return to South Australia. Questions which sought details on these matters included ...

- Do you still call South Australia home?
- Do you plan to return to South Australia to live?
- If yes, what are the main reasons?
- If you plan to return to South Australia, when will it occur?
- If you plan to return to South Australia, what level of remuneration would you seek?
- What South Australian Government initiatives would you like to see introduced to encourage your return?

The most interesting feature of the responses is that the relationship between those who plan to return and those who do not is reversed for each group. More than 60 percent of the self nominated group plan to return, while 60 percent of the Alumni group do not. In terms of policy, these results are significant, in that the self nominated group are generally enthusiastic to return, whereas the Alumni group would appear to be more contented with their current interstate location. This does not mean, however, that a proportion of this group could not be persuaded to consider the advantages of a return to the State.

The group expressing an intention to return home has a number of characteristics, some of which are likely to influence any policies which might be developed to attract some of this group back to South Australia. The dominant reasons for wishing to return to South Australia are lifestyle reasons, revolving around family, friends, lifestyle, environment, climate and house and land prices.

On the other hand, among respondents who do not intend to return to South Australia, the dominant reasons are job related, especially among the self nominated group. Although jobs are less significant for the Alumni group, factors relating to being established and lifestyle represent strong forces working to keep these people at their interstate location.

More than 40 percent of the self nominated group who want to return to South Australia are in the 20 to 29 years age group, along with a further 28 percent aged 30 to 34 years. Therefore, this group is predominantly youthful. In contrast, slightly less than one third of the Alumni group are aged 20 to 29 years, and 22 percent are aged in their thirties. The real difference between the two groups is that about one third of the Alumni group who wish to return to South Australia is aged 50 to 59 years.

The income levels of persons presently in interstate locations, and who wish to return to South Australia, is relatively high, and more so among the Alumni group than the self nominated group. The implication for Government in these results is that any jobs designed to encourage a decision to return to the State will need to have associated salary levels capable of matching current salaries.

It is clear that the predominant occupations of persons expressing an interest in returning to the State work in professional occupations. This is clear evidence that for these persons to actually make the decision to return, there will need to be an appropriate job structure in place at the time they make their decision.

The South Australian Labour Market and Its Impact of Interstate Migration

The role of employment and economic issues in driving processes causing out-migration from South Australia are indisputable. The migration of people to other regions in search of employment is a feature common to most societies throughout the world. Further, the process can bring benefits to individuals and nations but it can also diminish the vitality and potential of a region if it continues to lose more skilled and experienced people than it gains. The available evidence indicates that South Australia is experiencing such a problem.

The availability of sufficient, secure, rewarding and well paid employment has a significant influence upon population levels. Issues such as employment security, access to accredited training, career path opportunities, rates of pay and working conditions are among the key drivers of decisions about where people live and work. If working conditions or employment prospects deteriorate in one region relative to other regions there is an increased chance that people will leave in search of suitable employment.

The characteristics of the labour market both in South Australia and along the eastern seaboard significantly influence the migration process. The project sought to examine carefully the current characteristics of the South Australian labour market, and changes that had occurred to it in the last decade, especially in terms of their impact on job opportunities, skill shortages, full time and part time employment, hours of work, and size of income, and how these were likely to influence the migration process, especially labour force migration. The results of this examination have been presented in Chapter Seven.

Over the last decade there have been a number of changes in the South Australian labour market, including ...

- A decline in the number of full time jobs
- Increased growth in part time jobs, which have favoured males more than females
- Employment growth has occurred predominantly in low wage areas
- Unemployment has increased and is high by national standards
- Average weekly earning have deteriorated by national standards
- Low levels of skilled vacancies
- Net loss of 25,000 public sector jobs 1990-99
- High levels of under employment by national standards

South Australian's are likely to be attracted to other states because there are relatively more full-time jobs and skilled employment vacancies available. Employment can often be more attractive interstate because higher salaries, benefits and career paths are available.

Deterioration in South Australian income levels relative to the nation and other states is likely to fuel population outflow. While all other mainland states experienced an increase in average household income over the 1991 to 1996 period, South Australia experienced a 1 percent decline.

In the 1993-94 to 1998-99 period, average household income for South Australia increased by around \$90.00, compared to \$156.00 for Australia as a whole.

Historically, low labour costs relative to other states have been regarded as an advantage for South Australia. It has been argued that maintaining a low wage cost regime will promote business investment. However, in the context of the growing importance of knowledge and skill to successful economic development it would seem prudent to re-evaluate this strategy, particularly given evidence of a sustained deterioration in average weekly earnings relative to the nation.

The lower wages and salaries now prevailing in South Australia relative to the nation are likely to act as a disincentive to the growth of a skilled workforce, with the serious risk that a low wage regime will fuel population outflow as highly qualified and skilled people leave South Australia for regions where earnings are relatively higher.

Matters of salary differential between South Australia and the eastern seaboard, promotional opportunities, and career advancement prospects for people moving to South Australia will need to be examined. If these matters can be addressed satisfactorily, there is a strong possibility that net out-migration levels from South Australia can be lowered as aged employees retire from the workforce in the near future.

Skills Shortages and an Ageing Workforce – Impact on Interstate Migration

Acting to offset some of the forces driving migration from South Australia are important demographic changes taking place in the South Australian workforce. Like the population as a whole the South Australian workforce is ageing. This is particularly so in a range of skilled occupations. The ageing of the South Australian workforce is likely to be a key source of demand for employment over the next five to ten years. For example, 12 percent of employees, or 63,500 persons, are aged 55 years or older, 14 800 are aged 60-64 years and 11,600 are 65 years and over. Among managers and administrators, 11, 300 (23 percent) are aged 55 years and older, and for professionals there are 8,500, or 11 percent aged 55 years or older. If employers replace retiring employees a large proportion of this employment is likely to be full-time and relatively well paid managerial, professional and trades related positions. The availability of a greater number of relatively high paid skilled positions would make South Australia a much more attractive place to live.

A sizeable ageing workforce predicts an increased demand for certain jobs within a specific time frame. These positions may be filled from supply sources within the State, or they may be filled from interstate supply sources. In the latter case, there will be a favourable impact on the level of net interstate out-migration from South Australia. However, for this

process to occur, there will need to be created a favourable environment which encourages people presently located interstate to return to these positions.

Current skills shortages indicate existing demand for certain types of jobs. South Australia is experiencing skill shortages in a number of areas, particularly in the professional areas of childcare, accountancy, Nursing, pharmacy, physiotherapy, and law, information technology areas of systems management, programming language, database management, communications and general applications, and the trade areas of metal work, tool making, automotive, electrical, panel beating, air conditioning, mechanical, joinery, plastering, bricklaying, cabinet making, hairdressing and upholsterers. Similar shortages also exist in eastern states.

It would seem that South Australia's skills shortage is caused by differential pay rates between this State and the other States. In other words, there is a skills payment pecking order between the States, which presently works to South Australia's disadvantage. The completion of preparations for the Olympic games in Sydney may work to reduce the significance of the pecking order, with some impact on levels of net interstate out-migration from South Australia. However, the current skills shortages in the State have implications for the State Government. Current skill shortages could be addressed through skilled migration from interstate and overseas while other may be filled by locally available people. But, much more work needs to be done on quantifying and identifying the reasons for particular skill shortages in South Australia.

If the Government were to react to these implications, the probability is high that levels of interstate migration to South Australia would increase and levels of migration to other states would reduce.

Job creation policies to this point have emphasised the lower skill end of the market. Research associated with this Report indicates that the emphasis should be on higher skilled employment opportunities which cater for people with experience. This is particularly the case in the professional sector, where it would seem that the Government is not encouraging the professional sector. In this area there is a need for more relationships between the Government and the professions, especially the law and accountancy, of the kind it has created with EDS. In terms of the professional workforce, there currently exists a number of disadvantages in South Australia, including ...

- Professional shortages were not in the area of new graduates but in areas requiring some experience, especially in middle levels
- Salary levels in South Australia were lower than in the eastern states
- Work done in South Australia not as 'exciting' as that interstate
- Scale of operation differences existed in South Australia, compared with interstate operations
- South Australia was seen increasingly a branch office state
- Big companies, especially in law and accounting, are based in eastern states
- South Australia lacks presence of national companies
- Adelaide is increasingly perceived, especially in law and accounting professions, as a backwater

Given the importance of the labour market as a factor strongly influencing interstate migration, the Report has developed a number of policy considerations, centred around policies designed to ...

- Increase investment and employment
- Respond strategically to skill shortages through education and training
- Generate better information for a better understanding of the labour market

The details of possible policy considerations have been presented in Chapter Seven.

It is clear that were these issues addressed by Government, the impact on employment levels, job variety and opportunities for promotion within the professions would increase substantially, and the impact on interstate migration levels would be profound. Policy initiatives along these lines would work to reinforce advantages that South Australia already possesses, including ...

- Lifestyle
- Lower overheads
- Housing costs, availability, affordability
- Living costs
- The 'granny' factor
- Friends network
- The Old School tie
- Education opportunities

Main Features of a 'Bringing Them Back Home' Policy

The research completed for this consultancy has generated a number of strategies which could be employed in any program to 'bring home' former residents of the State. Of course, these strategies would also increase the possibilities of residents of other states deciding to live and work in South Australia. These details are presented in Chapter Eight. The Report recommends that 'Bringing Them Back Home' strategies need to focus on ...

- people who can fill job shortages
- on young families
- those with an attachment to the State

There are obvious multiplier effects associated with attracting these kinds of migrants. Young families can be easily attracted by the existing infrastructure the State has in terms of educational facilities and variety. This is unquestionably the best state in which to educate and bring up a young family. However, the parents of these young families need to work, and it is finding opportunities for these parents that policies need to be developed and implemented. Some of these policies areas have been referred to above. Additional areas lie in the area of child care, which could be expanded at a cost not likely to exceed the benefit it generates. New policies aimed at 'Bringing Them Back Home' will strike a chord with expatriate South Australians, because most of them still call South Australia home. But there is no doubt that these types of policies, if successfully implemented, would prove attractive to natives of other states.

The consultants strongly assert that there is no point in offering inducements to people who cannot fill vacancies within the labour market.

We also believe that the State Government should take advantage of the forces working towards decentralisation. Many of these forces are the product of increasing communications efficiency in the areas of transport and data and information transmission. Some, however, stem from increasing environmental degradation in large cities, caused by over crowding, infrastructure deterioration and increasing inaccessibility. Other forces working to facilitate decentralisation are housing differentials between regions and states. South Australia is in a favourable position to exploit some of the processes which are encouraging mobility out of larger cities, especially Sydney and Melbourne.

Any policies developed to encourage a reduction in the levels of net interstate migration from South Australia should aim to meet the following conditions ...

- seek to fill immediate skill shortages which have been identified
- be a part of the economic development strategy for the State
- be demographically targeted towards households with young families
- recognise that the numbers will not be massive, but they will have the potential for significant multiplier effects
- development of inter-Government strategic alliances aimed at increasing international migrant settlement in the State.

The Government should avoid policies which seek to discourage people, especially those in the younger cohorts, from seeking experiences elsewhere. This is particularly relevant in the case of young graduates. Instead, policies relating to this demographic group should be designed to encourage them to return to the State at a later stage in their life.

Policies aimed at 'Bringing Them Back Home' should emphasise the State's strengths to groups in the family formation stages of life. Policies should be designed around the theme of the family friendly state. Policies promoting this theme could be developed by the Government alone, or in alliance arrangements with employers. These policies would build on many positive attributes the State possesses, including ...

- Housing styles, variety, quality
- Real estate prices and housing affordability
- Lifestyle
- Transport and accessibility
- Education at all levels and varieties
- Environment for raising children

Many policies, a number of which revolve around using the internet, could be implemented through relatively straightforward initiatives. Some of these are ...

- Establish a data base using alumni data. The database would be used to keep interested alumni appraised of changes occurring in the State.
- Maintain a website of job vacancies and housing opportunities. This web site would be open to all interested persons, and be a way of presenting to the market place some of the State's important messages relating to the family friendly state.
- Establish a link agency which can help match potential returnees with opportunities in South Australia, especially employment and real estate services. These agencies would be similar to tourist bureaux operated outside the state. They would represent a shop front to promote the family friendly image of State.

- Establish a mailing list to receive electronically or in hard copy regular bulletins of opportunities which could impact on interstate migration levels to and from South Australia.
- Convene meetings of former South Australians in Sydney, Melbourne and Canberra on a regular basis to promote the policies of 'Bringing Them Back Home'.
- State scholarships for highest achieving students.
- Making incentives available to small business as well as large businesses to encourage family friendly policies universally within the private sector.
- Develop policies specifically designed to attract retirees to the State. Policies around this objective would have significant regional implications, especially for the Riverland, the Yorke Peninsula, the Fleurieu Peninsula, Port Lincoln and Whyalla.

It is imperative that population increase, on its own, not be seen as a solution to the State's significant economic problems, as an increase in population, *per se*, will not result in increased prosperity. Instead, any policy aimed at attracting more people to the State must be carefully targeted so that it does not result in more people arriving in South Australia who ...

- will compete for existing residents jobs,
- will add to the already large numbers of unemployed persons.

The argument here is that South Australia *does* need to have a population policy and that the policy must be integrated with, and be part of, a development strategy for the State.

It is also the case that the encouragement of internal migration towards South Australia, which is peripheral to the main economic centers of Australia, is not pushing against overwhelming economic and demographic trends. Indeed, the Report has argued that there are a number of elements, both external and internal to Australia, which could be seen to be working in favour of a reversal of the net migration losses presently being experienced in South Australia.

The survey of Alumni members of Adelaide and Flinders universities, and the focus group meeting conducted as part of this Report, have identified a number of perceived disadvantages of South Australia. In some cases, there is a possibility that the perceptions can be broken down through policy interventions by the Government.

On the other hand, the State possesses a number of advantages, and these are clearly the elements which need to be stressed in a range of policies and programmes which might be designed to attract workers from other states, and overseas, to settle in South Australia. Principal among these factors are lifestyle, lower overheads, housing and living costs, and the 'granny factors'.

The present Report recommends that the State initiate a 'Bringing Them Back Home' program, the main points of which would be ...

- To fill skill shortages which exist in the State's labour market.
- Integrate the 'Bringing Them Back Home' policy with any economic development strategy for the State.
- To target policies to people in the family formation age categories.
- To focus relevant policies on those persons with an already strong attachment to the State.

- Any policies developed should not require a substantial investment of public funds.
- The numbers attracted back to the state by proposed policies will not be massive, but will be in key areas which will produce significant multiplier effects.
- Policies need to integrated with other attempts to attract businesses and people to the State, including efforts aimed at interstate businesses and those seeking to attract overseas immigrants.
- Policies designed to 'bring them home' should not be targeted at younger adults. Indeed, the Report believes that this group should be encouraged to seek experience interstate, and that the State seek to take advantage of their experience at a later stage in their career.
- The development of policies designed around the theme of South Australia as the 'Family friendly State'.

It is also recommended that any policies developed should make extensive use of the internet, particularly in establishing ...

- A database of potential returnees.
- A 'Bringing Them Back Home' program website, which provides potential returnees with information on the program's development, as well as details on developing job opportunities within the State, the opportunities for employers to place vacancies and employees to lodge their CV.
- Link agencies to help persons interested in either returning or coming to the State to match emerging opportunities with their needs.
- A mailing list whereby interested persons could be kept informed of relevant developments which could influence any decision to move to South Australia.
- Expatriate meeting in the major eastern seaboard capital.
- A scholarship plan for undergraduates which would help to keep the best Year 12 achievers in the State.
- An increased recognition of South Australia as a retirement location, especially in some of the State's regional areas.

Summary

The 'Bringing Them Back Home' program should be focused on filling strategic skill shortages which are currently a constraint on the development of the state. The policy is unlikely to involve large numbers of people, but can make a difference because of its strategic targeting. It needs to be integrated with State Development Strategies and initiatives as well as with other programs with similar objectives, such as in training and international migration. It should be targeted at people with skills in demand, strong linkages with South Australia and in the young family formation years. The proposals which are presented in the Report do not make massive new demands on funding and they should be able to be undertaken within the existing bureaucracy.

CHAPTER ONE

BRINGING THEM BACK HOME – BACKGROUND AND STRATEGIES TO PREPARE THE REPORT

1.1 INTRODUCTION

In the last decade South Australia has recorded lower levels of population increase than at any time during the post-World War II period. Low levels of population growth, stability or even small decreases in overall population numbers need not be associated with a decline in prosperity. One need only point to the situation in several European nations to demonstrate this. In addition increased population growth may not necessarily be associated with prosperity as can be seen in the strong negative correlation of national GDP per capita and rates of population growth for world nations (World Bank 2000). In the South Australian case however the reduction in population growth rates which has followed the State Bank collapse in the early 1990s has had some distinctive features which suggest that it is hampering improving levels of wellbeing within the State. These include...

- There have been high levels of net interstate migration loss of young adults which in concert with low fertility has contributed to the State having the oldest and fastest ageing population in the Commonwealth. The prospects are that if these trends continue the State will have a highly unbalanced age structure by the 2010s and 2020s which will see very high numbers of old people in relation to those in working ages.
- The net migration out of the State is selective of highly educated and skilled groups which may be creating skill shortages at certain levels and in population areas which are a blockage to economic development.

The late 1990s saw an increase in migration from other States into South Australia although the outflow has also continued so that net outmigration has remained substantial. This has led the South Australian Government to commission a study to examine this interstate migration in greater detail. This involves finding out more about the outmovement, especially that of young graduates and highly skilled people and to investigate what factors are likely to attract them back to South Australia. It also involves examining in greater detail the migration into the State including where people are coming from, their characteristics and the factors which are influencing this movement. The present study is a response to these requests from the South Australian Government.¹

1.2 AIMS AND OBJECTIVES

- To identify in detail the patterns of interstate migration to and from South Australia, especially for the past six years.
- To identify the factors driving interstate migration to and from South Australia.
- To identify strategies aimed at increasing the number of skilled interstate migrants coming to South Australia.
- To identify strategies aimed at attracting university graduates who have left the State back to South Australia.

Some press reports outlining the thinking behind the project are included in Appendix A.

• To identify regions and groups to be targeted for these strategies.

1.3 PREVIOUS STUDIES

There is a wealth of literature on interstate migration in Australia (e.g. See Choi and Burnley 1974, Bell and Hugo 2000, Maher and Mackay 1986, Rowland 1979, Bell 1992, 1995, 1997, Jarvie 1989 and Hugo 1974, 1983a, 1986). The literature specifically relating to South Australia is somewhat limited (Hugo 1971, 1983b, Bell 1997a, 2000). The bulk of the studies referred to above however have been devoted to an analysis of the census data documenting the number of people moving between States in intercensal periods and their characteristics. There has been no study in Australia which has sought to investigate the possibility of Government intervention seeking to influence interstate migration patterns as is canvassed in the present study.

This is not the case elsewhere however. In the United States a number of States face the problem of a net interstate migration loss of young highly educated and skilled workers (e.g. See De Jong and Klein 1999). Some States have initiated programs to arrest these losses but of particular interest here are States which have sought to 'bring back' people who had previously left the State. Iowa in the mid-west of the United States is a case in point. This has a long history of net migration loss and in the mid 1980s initiated a promotion of 'spend your holidays in your home State' to encourage people who had previously lived in the State to spend their vacation in Iowa and thereby assist the State's ailing economy during the farm crisis of the 1980s. In the 1990s the State has an active programme to bring back young former Iowans. Some features of the program are as follows (Kenworthy 2000)...

- Iowa has restructured its economy to focus on new areas such as advanced technology but is suffering from a shortage of skilled people in many of these areas preventing expansion. It has a low unemployment rate.
- Iowa has undertaken a heavy promotion program with the slogan 'Iowa: The Smart Career Move' aimed at young professionals with skills needed by the State, especially former Iowans.
- The State Government has held receptions in places like New York City, San Diego, Chicago and Los Angeles for former Iowans and have been overwhelmed by the response.
- They have had booths of Iowa's largest employers at events which their target group (former Iowans in the young family age group with professional qualifications) are likely to attend at events like the annual cross Iowa bike ride.
- They have created a website (www.smartcareermove.com) that lists more than 2,000 professional and technical job openings in Iowa and allows people to post a brief resume at the site.
- The Government has sent letters to more than 200,000 people asking former residents to take another look at the State they left when times were bad. These lists of names were derived from Iowa's universities and colleges' alumni who live out of the State.
- The Government explicitly targets young adults beginning to rear children and emphasises the thriving local economy, wonderful quality of life, excellent health care, schools and cultural activities, low cost of living, low levels of crime and low congestion. The latter was especially stressed.

'If you take a commute in a large city of two hours a day and knock that down to ten minutes in Cedar Rapids, that's 52 working days you just gave yourself back.'

- The State has to battle against a national perception of Iowa being a rural backwater. For example Bill Bryson wrote that 'I came from Iowa nobody ever goes to Iowa.'
- The campaign is relatively recent but so far around 100 people have taken up and 7,000 have asked to receive regular email updates on Iowa job opportunities.

Other States in the mid-west of the United States have initiated similar programs. Nebraska has sought out alumni of its State university living in California and West Virginia using the slogan 'Welcome Home to West Virginia' and has wooed natives who left to return home to spend their retirement (Kenworthy 2000). One of the most comprehensive programs has been put in place by Minnesota (Minnesota Department of Trade and Economic Development 2000) and is entitled 'Come Home to Minnesota' and is styled a 'workforce recruitment initiative'. Some features of the program are as follows...

- Its *aim* is 'to recruit former Minnesotans back to Minnesota to fill thousands of manufacturing, technical and professional job vacancies State wide'. Its *benefits* are seen as twofold...
 - o to support economic growth by adding new qualified people to the workforce
 - o to rejuvinate communities through the addition of young adults and families.
- Unemployment is low and there are substantial numbers of job vacancies.
- There is a strong element in the program of responding to the ageing of the population caused by outmigration of young people in the 1980s and early 1990s and inmigration of retirees.
- The Come Home to Minnesota program is a partnership between the State Government Department of Trade and Economic Development, other State agencies, local communities and businesses.
- There is a targeting of manufacturing, technical and professional workers in their 20s and 30s who have computer access. They have created a jobs database on the internet.
- There area three components to the program...
 - Each community forms a committee which gathers mailing lists of potential returnees form high school and college graduation lists, school reunion committees, out of State newspaper subscriptions and tourist information requests.
 - o DTED has a mail-out to all on the list of...
 - Promotional booklet
 - Instructions on how to reach the Minnesota Job Bank, the State website with job postings
 - Local housing contacts in their home community
 - Key local employers with job opportunities.
 - o there is a meeting between local businesses and State officials to involve them. State programs like Job Skills Partnership, MNSCU customised training and Minnesota Technologies Inc. programs
- The community committees are made up of four groups...
 - o relevant State departments
 - o community leaders

- o educated partners e.g. universities providing alumni lists
- o business partners.
- The steps involved in the process are as follows...
 - o hold local organisational meeting
 - o collect and complete list of prospects
 - o prepare distributional lists and promotional material
 - o arrange website demonstration for local employers to demonstrate how to post jobs
 - o distribute materials
 - o review results.
- Some marketing strategies that have been found to be effective include...
 - o letters to former residents should come from a local recognised name
 - o distributions right before holidays are effective. People returning to visit family can meet prospective employers, check housing possibilities etc.
 - o local 'granny networks' can be successful in encouraging young adults to return
 - o housing information is crucial
 - the program is focused on former Minnesotans they are already aware of the strengths of Minnesota but may not be aware of the job opportunities or ease of finding tem
 - o there is a need to be creative in looking for prospects (e.g. using tourism).

There is little on the success or otherwise of these initiatives, since they are little more than a year old. There does not appear to have been such progress in Australia except for some attempts by the Tasmanian Government to attract back former residents a decade ago. These did not constitute a comprehensive program. It will be noted that in each of the US State cases where 'Bringing Them Back Home' programs have been initiated there have been low levels of unemployment and high levels of demand for skilled labour.

1.4 SECONDARY DATA SOURCES

In the preparation of this report a large number of sources of information were accessed. This section summarises the main sources of secondary data accessed, while the following section discusses the efforts made to collect information specifically for this project. The first major secondary data source accessed was from the Census of Population and Housing. The first Australian census to collect detailed information on internal migration in Australia was that of 1971 and each subsequent quinquennial enumeration has included questions on internal migration. Prior to 1971 the census asked the State of *birth* of the Australian population so that lifetime interstate migration of that group could be calculated (e.g. see Rowland 1979, Fisher 1969). After 1971 only the country of birth was asked of census respondents.

The internal migration questions asked in the censuses since 1971 have generally been similar (but not exactly the same) as those asked at the 1996 census and included in Figure 1.1. This involves identifying 'five year' internal migrants as those whose usual address on the night of the census was different to that of five years ago and one year migrants as those whose usual place of residence is different to that one year ago. This method directly misses many internal migrants such as...

- Those who moved more than five years ago
- Those who moved and returned home between the censuses.

The problems with these data have been extensively discussed elsewhere (see especially Bell 1992, Chapter 2 and Bell and Stratton 1999).

In addition the study makes use of the quarterly estimates of interstate inmigration that are made by the Australian Bureau of Statistics in the process of making quarterly estimates of the total population of each of Australia's States and Territories. Since 1986 these estimates have been made using information on the number of interstate changes of address advised to the Health Insurance Commission in the process of administering Medicare. The methodology uses transfers of persons aged 0-14 and uses expansion ratios to derive an estimate of total movement.

The census data are especially useful since they make it possible to identify the demographic, social and economic characteristics of migrants and non migrants. This is not possible in the ABS estimates data. In neither source however is there information about the motivations of the migrants.

The other major secondary data source employed in the present study is the *Graduate Destination Survey* which is conducted on an annual basis by the Graduate Careers Council of Australia. This survey allows for an analysis of the destination of graduates by age, sex and field of study. In April of each year, the Graduate Careers Council of Australia (GCCA) surveys all graduates from all Australian universities. The principal purpose of the annual Graduated Destination Survey (GDS) is to monitor the occupation destinations of graduates and to provide data on the relationship between supply and demand in the various professions. Graduates in employment at the time of the survey are asked to provide the postcode location of their employer, and this information has been used to inform the analysis of movement of graduates from South Australian universities to interstate employment. The analysis here is based on data derived for 1992, 1996 and 1999.

The GCCA has developed a questionnaire and that is distributed by each Australian institution of higher education to most students who qualify for the award of a degree or diploma each year. In some circumstances institutions use their own versions of the standard questionnaire and some data about students who proceed to higher degrees is made available be student records offices. Responses are coded according to GCCA standard coding instructions and forwarded to the GCCA office in Melbourne for computer processing and compilation.

There are a number of limitations which need to be borne in mind in utilising the Graduate Destination Survey ...

• The data do not identify graduates who may have come to South Australia from an interstate location to complete their studies, and who have subsequently returned to their home State to seek employment at the completion of their course. Table 1.1 provides a form of gauge of this phenomenon, and shows the numbers and proportions of students enrolled in 2000 who have an interstate home address.

Figure 1.1: Internal Migration Questions in the 1996 Australian Census of Population and Housing

7. What is the person's usual address?	() The address shown on the	() Same as for Person 1
• 'Usual' address is that address at which the person has lived or intends to live for a total of 6 months or more in 1996.		() Elsewhere in Australia – please specify address
 For persons who now have no usual address, write 'no usual address'. For boarders at boarding school or college, give address at boarding school or college. 		Street number and name Suburb, rural locality or town
	State/Territory Postcode () Other country	State/Territory Postcode () Other country
8. What was this person's usual address one year ago (at 6 August 1995)?	() Same as in question 7	() Same as for Person 1
 If the person is less than one year old, leave blank. For persons who now have no usual address on 6		() Elsewhere in Australia – please specify address
August 1995, give the address at which they were then.	Street number and name	Street number and name
	Suburb, rural locality or town	Suburb, rural locality or town
	State/Territory Postcode () Other country	State/Territory Postcode () Other country
 9. What was this person's usual address five years ago (at 6 August 1991)? • If the person is less than one year old, leave blank. • For persons who now have no usual address on 6 August 1991, give the address at which they were incompleted. 		 () Same as for Person 1 () Same as in question 8 () Elsewhere in Australia – please specify address
then.	Street number and name	Street number and name
	Suburb, rural locality or town	Suburb, rural locality or town
	State/Territory Postcode () Other country	State/Territory Postcode () Other country

Source: ABS 1996, p 32-4

The evidence of the table suggests that in 2000 there are 695 students enrolled at Adelaide University whose usual address is an interstate location. Assuming that one third of these students graduate each year, there will be approximately 230 students who move from South Australia to interstate locations at the completion of their studies. The University of South Australia and the Flinders University of South Australia are likely to generate similar proportions. Therefore, these numbers will work to reduce the significance of the numbers produced from the Graduate Careers Council of Australia data. However, precise comparisons are not possible because the GCCA data represent numbers based only on graduates who have responded to the annual GCCA survey. Nevertheless, the impact of interstate students who study in Adelaide and then return to their home State needs to be taken into account in any implications and conclusions which might be made from the GCCA data.

Table 1.1: Adelaide University Enrolments, by Home Postcode, 2000

State	Number	Percent
New South Wales	273	2.3
Victoria	215	1.8
Queensland	81	0.7
South Australia	11,081	94.1
Western Australia	50	0.4
Tasmania	23	0.2
Northern Territory	53	0.5
Not stated (mostly overseas	916	7.8
students)		
Total	11,776	100.0

Source: Vice Chancellor's Office, Adelaide University

• A second issue relates to the response rate to the survey. Overall in 1998 this was 65.1 percent (67.8 percent for Australian citizens) which was up from 1997 (64.2 percent) and down from 1996 (68.3 percent). The response rates for South Australian universities in 1998 were 72.3 percent for Flinders University, 52.6 percent from Adelaide University and 60.8 percent from the University of South Australia. A study has been made of non-respondents from the GDS (Guthrie and Johnson 1997) which found that aggregated responses are a reasonably accurate reflection of the total population.

1.5 PRIMARY DATA COLLECTION

To comprehensively address the objectives of the present study the secondary data sources examined in the previous section need to be supplemented with some information from interstate migrants themselves. It was decided to focus in this effort on South Australians who had left the State to investigate not only their motivations for leaving but also the possibilities of attracting them back to the State. In this study it was important to focus on

highly skilled people who can fill job vacancies which exist in South Australia and *not* to recruit people who will compete with resident South Australians for jobs or remain unemployed after moving to the State.

There were two strategies adopted in order to create a sampling frame of ex-South Australians currently living interstate from which to select respondents for interview. The first was what could be regarded as a 'self-selecting' sample by creating a 1800 telephone number whereby South Australians resident interstate could nominate for the study or their South Australian based relatives could nominate them. On Wednesday 3 May 2000, the Premier held a press conference at the National Key Centre for Social Applications of GIS, Adelaide. The following day, *The Advertiser* reported:

A toll free number has been set up by the State Government so parents of graduates and skilled workers living interstate can tell the Government where to find them. The toll free number and a special website are part of the Government's 'Bring Them Back Home' strategy aimed at getting professionals and tradespeople to return to South Australia to live.

As a result, the Department of Premier and Cabinet received 118 telephone calls and 92 email responses. However, some calls and emails were on behalf of more than one persons, with the result that these responses represented 233 persons. There were no significant differences between email and telephone responses. Responses from telephone callers were reported on prepared proformas which often led to more specific information than obtained from email responses, especially in relation to details such as age and occupation.

Inevitably, some respondents misinterpreted the press article and used the opportunity to attack the proposed policy initiative or to seek application details for employment opportunities provided by the proposed policy initiative. A number of callers were from people who were presently in South Australia, but on the verge of considering a move away from the State. A number of responses were from parents responding on behalf of children presently located in other States.

Each of the responses were assessed and classified on the basis of the information they contained. The main points emerging from the analysis of these phone calls and email messages were ...

- 25 percent of respondents were parents making contact on behalf of children. This indicates a strong 'family' component to any policies aimed at 'Bringing Them Back Home'.
- 77 percent of respondents were from outside South Australia. Many of these respondents indicated that they were interstate because of 'jobs'.
- Ten percent of respondents were presently resident at an overseas location. Predominantly, this group was experienced in management and highly qualified, suggesting that this could be a further target area for any 'Bringing Them Back Home' policies.
- More than 60 percent of respondents were less than 45 years of age. If successfully targetted, this group could have much to offer the State.
- More than one quarter (26 percent) were in 'partnerships, and half of these had children. Therefore, policies directed at migrants with children may be useful in turning around the current levels of net out-migration from the State.

- Two thirds of respondents possessed formal educational qualifications.
- Almost three quarters (73 percent) of respondents were currently employed. Therefore, those responding to the initial 'bring them back home' calls have something to offer the State, and are not out-of-work people seeking anything that might be available.
- Most (82 percent) respondents were positive in their comments, suggesting that there is an eagerness on the part of South Australians living interstate to return home, provided suitable conditions exist.
- The existence of 'relevant' employment opportunities seems to be the critical factor mentioned by most respondents. 'Family/Lifestyle' was another consistent factor mentioned in responses.

This initial analysis of responses to the 1800 hotline and the Department of Premier and Cabinet email address formed the basis of a questionnaire developed for distribution to those respondents who were presently located interstate. The details of information obtained from this group have been detailed in a subsequent chapter of the report.

From the self nominated group 199² people who resided at an interstate location were asked to complete a comprehensive questionnaire which, in the case of those persons who registered their interest in the project through the website, were delivered and returned through the email system, while those who had used the 1800 telephone number received their questionnaire through the post and returned it either in a pre-paid envelope or by fax. Full details of the content of the questionnaire are presented in Appendix B.

Questionnaire responses were received from 100 of these persons, representing a response rate of 54 percent. This is a quite high response rate for a mail-out survey although the self-selected nature of the group would indicate a strong interest in the study and suggests that a large proportion would return their questionnaires.

The programs in the United States designed to 'bring home' young people who had earlier left the State which were referred to earlier in this chapter all utilised alumni lists of universities and colleges as their basic sources of potential returnees. This makes sense since the imperative is to attract people with skills and experience in short supply. Accordingly, it was decided in the present study to interview a sample of alumni from South Australian universities. These were drawn from the alumni lists of Flinders and Adelaide Universities. Those from the University of South Australia could not be made available in time for the study. Accordingly, from the lists of alumni who are resident in other States 300 respondents were randomly selected for interview from Adelaide University and 274 from Flinders University. They were sent the questionnaire in Appendix B. When the cut-off time for return of the questionnaires was reached, 156³ or 52 percent of the group had returned their questionnaire while 68.6 percent of those from Flinders University did so. This is a very healthy response rate for such a survey.

² 34 of the contacts were unusable because of limited address information.

There continues to be a flow of questionnaires back but they are not included in the analysis.

1.6 OUTLINE OF THE STUDY

The study begins with a presentation of the objectives of the project and a discussion of the concept of 'Bringing Them Back Home'. It then moves to a brief review of similar strategies adopted in the United States. The sources of data employed in the study are critically assessed. The second chapter presents in some detail the South Australian demographic context, since this is crucial background to a consideration of a bringing them back home strategy. In particular, trends in the processes of fertility, internal migration and the ageing of the population are discussed. Attention is paid to official projections of the outlook for the Australian population and the imbalance in the age structure, which will result if current population trends continue. Chapter Three is devoted to a comprehensive analysis of how interstate migration has evolved in South Australia. It is shown that the State has experienced net outmigration to other parts of Australia for most of the last century. Special attention is paid to the patterns of movement in the last decade and the characteristics of migration. It is shown that the movement is highly selective of young adults and is a definite brain drain in the sense that the outmigrants are disproportionately drawn from those with high levels of educational attainment.

The next few chapters focus on the South Australians who have moved out of the State and are currently living elsewhere in Australia. Chapter Four focuses on the alumni of the three South Australian universities who are living outside the State and in the years 1992 to 1999. It particularly focuses on the fields of expertise of these groups. Chapter Five is an examination of the characteristics of the sample of South Australians who were nominated through the 1800 number. It considers the reasons they gave for moving and canvasses the possibility that they might return to South Australia and what types of factors would induce them to return. Chapter Six is an examination of the same type of the sample of alumni from South Australian universities.

The results of Chapters Five and Six indicate that employment is a critical factor in the possible return of former residents to the State. Accordingly, Chapter Seven is a comprehensive analysis of labour market and economic trends in South Australia which is designed to identify skill shortages in the State which might be filled by returnees. This theme is continued in Chapter Eight which focuses specifically on the nature of skill shortages in South Australia and possible strategies for attracting people to fill those. The final chapter presents a series of recommendations which emerge from the report relating to the 'Bringing Them Back Home' strategy.

CHAPTER TWO

THE CONTEXT FOR THE STUDY

2.1 INTRODUCTION

South Australia's population represents its most important resource yet our understanding of how it is changing in the new millennium and the implications of this change are limited. As the slowest growing of Australia's mainland States in the 1990s it is assumed that the population is a static and unchanging backdrop against which economic forces are played out. The truth is quite different. The State's people have changed substantially over the last 15 years and it is important for policy makers to be aware of these changes and to anticipate likely future changes. All policy development should be to meet the needs of people and a sound knowledge of how those people are changing is an essential ingredient for effective policy development and planning.

Populations are in a constant state of change and this chapter presents a summary profile of South Australia's population at the turn of the new century and builds upon and updates past such assessments (Hugo 1983b, Bell 1997a, Hugo 1999). The 2001 population census will allow a comprehensive stocktake to be made of changes in population in the 1996-2001 intercensal period but this will not be possible until late 2002.

2.2 POPULATION GROWTH IN SOUTH AUSTRALIA

Although Australia's current rate of population growth (around 1.2 percent per annum) is less than half that prevailing in the boom years of the 1950s and 1960s it remains among the highest in the OECD nations and not much lower than the world average (1.48 percent). Nevertheless, in the nineties South Australia's rate of population growth (around 0.4 percent per annum) was lower than the other mainland States and Territories. Figure 2.1 shows clearly that the State's population grew faster than that of the nation during the long boom period of the period up to the early 1970s and grew slower than the national average in the subsequent period when Australia's overall growth was reduced. Hence both the Australian population boom and the subsequent bust were both exaggerated in South Australia and this has had a number of significant effects on South Australia's population structure. It also should be noted that South Australia's share of the national population has declined from 9.2 percent in 1961 to 8.1 percent in 1996 and 7.9 percent in 1999.

It will be noticed in Figure 2.1 that the rate of growth of South Australia's population bottomed out in 1992-95 at 0.22 percent per annum. However, there has been a recovery in subsequent years so that in 1999 the population grew at almost twice this rate (0.42 percent). Nevertheless this is still the lowest rate of growth on the mainland as Table 2.1 indicates.

Nevertheless it will also be noted in Table 2.2 that only the so-called 'rustbelt' States of New South Wales, Victoria and South Australia increased their *rates* of population growth between 1995-96 and 1998-99. The most substantial increases were in Victoria and South Australia. It is still, of course, too early to identify this as a significant turning point in the patterns of population growth between States. The fastest growing populations in Australia

are still in Queensland, Western Australia and the Northern Territory. However, the gap between the 'sunbelt' and 'rustbelt' States has converged in the last five years. Tasmania, however, has experienced actual population decline from 1996-97 until the present.

Figure 2.1: Australia and South Australia: Rate of Population Growth per annum, 1947-99

Source: ABS 1986 and ABS Australian Demographic Statistics Quarterlies, various issues

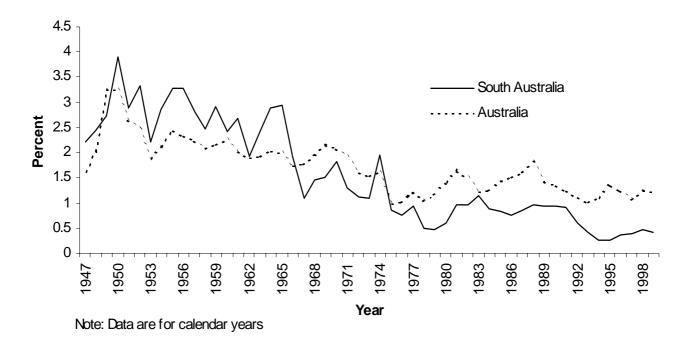


Table 2.1: Australian States and Territories: Population Change in the Twelve Months to December 30, 1999

Source: ABS 2000a

	Population at end	Change over pro	evious year
	December Qtr 1999		
	'000	,000	%
New South Wales	6451.7	75.5	1.2
Victoria	4741.5	57.6	1.2
Queensland	3539.5	57.2	1.6
South Australia	1495.8	6.3	0.4
Western Australia	1873.8	28.3	1.5
Tasmania	469.9	-1.1	-0.2
Northern Territory	194.3	2.9	1.5
Australian Capital	311.2	2.8	0.9
Territory			
Australia	19080.8	229.6	1.2

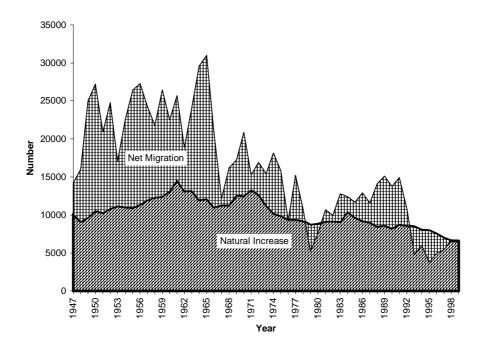
Table 2.2: Australian States and Territories, Change in Population Growth Rates Between 1995-96 and 1998-99

Source: ABS 2000a

	1995-96	1998-99	% Change in growth rates
New South Wales	1.19	1.2	0.8
Victoria	0.96	1.2	25.0
Queensland	1.99	1.6	-19.6
South Australia	0.36	0.4	11.1
Western Australia	1.86	1.5	-19.4
Tasmania	0.02	-0.2	-900.0
Northern Territory	2.26	1.5	-33.6
Australian Capital	1.93	0.9	-3.2
Territory			
Australia	1.25	1.2	-4.0

Figure 2.2: South Australia: Total Population Growth Showing the Natural Increase and Net Migration Components, 1947-99

Source: ABS 1986 and ABS Australian Demographic Statistics Quarterlies, various issues



It is important to disaggregate these trends in terms of the processes actually creating them. Population growth is the function of three basic processes: mortality, fertility and migration and each of them need to be considered separately. The components of the State's population growth are depicted in Figure 2.2 and a clear pattern is evident. Natural increase (ie births minus deaths) has changed very little in South Australia over the period in absolute terms (though not as a rate). On the other hand, net migration (excess of migration gains over losses) gain was consistently high during the boom period up to the late 1960s but has subsequently been considerably lower and in two periods (1977-81 and 1992-97) there were, in fact, more people who migrated out of the State (either to other States or overseas) than moved into it. While it is too early to make definitive pronouncements about a significant change in migration trends for the State, there was a recovery from the net migration losses of the 1990s in the first seven quarters of 1998-99 when the level of net immigration from overseas (5,558 persons) was greater than the net loss to other States (4,870 persons). However, in the eighth quarter of the period there was a higher interstate net migration loss (-1291) than a gain of overseas migrants (808).

The focus of the present report is on interstate migration and the role that it has played, and can in the future play, in South Australia's changing population. However, in considering population growth there are other demographic influences which also have an impact and at the outset it is necessary to briefly discuss them and their effects on population change in the State.

2.3 MORTALITY

As in the rest of Australia there has been a major improvement in mortality in South Australia over the period. This is evident in Figure 2.3 which shows the increase in life expectancy over the last century or so. Between 1947 and 1998 Australian males have increased their average span of life from 66.67 years to 75.86 (9.19 years) and women from 70.65 to 81.52 (10.87 years). This has been a massive improvement involving both major therapeutic advances and lifestyle developments. One of the major features of this has been an improvement in life expectancy among the older population. For the century preceding the early 1970s the bulk of improvement in Australian life expectancy had come about through a decrease in infant, child and, to a lesser extent, maternal mortality. Hence the life expectancy of Australians over age 50 changed little over that period improving 1.6 years for men and 4.2 years for women between 1870 and 1970 (Hugo 1986, 21). However, between 1970-72 and 1998 the improvement was 4.94 years for men and 4.68 years for women. This was largely as a result of reduction in death from ischaemic heart disease through medical advances such as by-pass surgery and the development of intensive care units, as well as lifestyle adjustments such as reduced smoking and improved diet. What this meant was that there has been in Australia an unanticipated greater degree of survival of our elderly population. This has proved especially significant in South Australia where as is shown later the aged are a larger proportion of the resident population than the other States. Moreover, service providers have been dealt a 'double whammy' since not only have they been confronted with a situation in which there are an unexpectedly large number of older people surviving but the survivors are 'sicker' than in the past. The people 'rescued from

Life expectancy is defined as 'the average number of years a person of a given age can expect to live if the present

mortality rates at all ages for a given period is maintained over their lifetime' (Hugo 1986, 19).

death' by the new developments in medicine who previously would have died are generally not rescued in full health. Accordingly the incidence of illness and disability among the elderly population has increased. Hence Table 2.3 indicates that the incidence of disability among the older population has increased in Australia between 1981 and 1998. From a South Australian perspective it is worth noting that South Australians over a long period have had above average life expectancy compared with Australia as a whole (Hugo 1983b).

Figure 2.3: Australia: Expectation of Life at Birth 1870-1998

Source: Hugo 1986 and ABS *Deaths Australia*, various issues

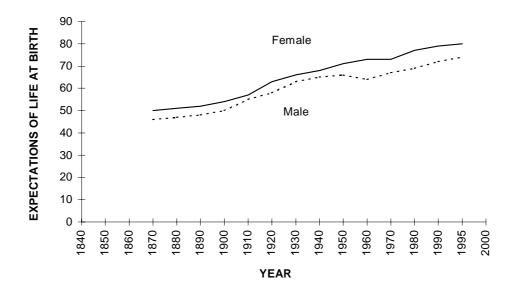


Table 2.3: Proportion of the Population with Disabilities and Handicaps

Source: Australian Bureau of Statistics 1999a, 18

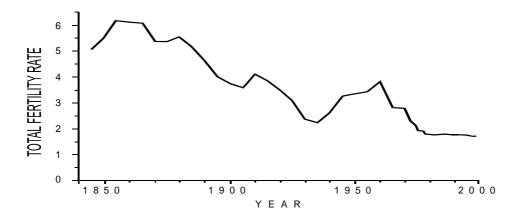
Age group	1981	1988	1993	1998
(years)	%	%	%	%
65-69	33.1	41.5	39.5	40.5
70-74	38.5	48.2	53.1	49.8
75 and over	53.1	63.4	64.0	67.5
All people	13.2	15.5	16.6	18.8

2.4 FERTILITY

Turning to fertility, Figure 2.4 shows trends in the Total Fertility Rate⁵ in South Australia over the last century or so. We will focus on the period especially and it is possible to identify three phases in the trends over this period. The diagram shows a sharp increase in fertility in the State during the early years taking the average number of children per woman up to over 3. This was followed by a steep decline between the early 1960s and the mid 1970s which saw fertility fall below replacement level (TFR of 2.1). The subsequent period however has seen stability in fertility levels around a TFR of 1.7. This level of fertility is somewhat lower than that of Australia as a whole and there has been a consistent pattern of South Australia's fertility being substantially lower than the national level. For example in 1999, 1996, 1986 and 1976 the State levels were 1.72, 1.75, 1.76 and 1.86 respectively compared to 1.74, 1.8, 1.87 and 2.05 for Australia. The distinctiveness of lower than average fertility in South Australia was reduced during the 1990s with Victoria and the ACT having lower fertility than South Australia in several years. Hence, it would appear that unlike the past when the ABS needed to include different fertility rates (lower) in population projections of South Australia than for Australia as a whole that this may no longer be necessary.

Figure 2.4: South Australia: Total Fertility Rate: 1845-1999

Source: Hugo 1983b, CBCS Demographic Bulletins and ABS *Births Australia*, various issues



In discussions of contemporary Australian fertility (eg McDonald and Kippen 1999) there is considerable debate about trends in national fertility levels. After a period of some stability in fertility trends in the 1980s the 1990s has seen a consistent pattern of decline each year in the Total Fertility Rate. It has fallen from 1.89 in 1992 to 1.74 in 1999 (a decline of 7.9 percent). Some have argued that this represents a new era of decline in fertility (McDonald

⁵ The Total Fertility Rate (TFR) 'indicates the number of children that will be born alive to a woman during her lifetime if she were to pass through all her child-bearing years conforming to the age specific rates of a given year' (Hugo, 1986, 43). More simply it indicates approximately the completed total number of children women are having on average at a particular time.

-

2000a) which could be placing Australia on a trajectory toward the very low levels of fertility being experienced in several European countries (Hugo 2000).

They relate to a number of significant changes in South Australian society. On the one hand, the position of women has changed considerably. This is reflected for example in an increase in participation in the workforce outside the home among the State's women. This is depicted in Figure 2.5 which shows clearly how the level of participation has increased at all ages since World War II but especially in the child bearing and post-child bearing years. Only between 1991-96 has there been a decline and this is undoubtedly due to some discouraged worker effect in the down turn of that period. Similarly Figure 2.6 shows a massive increase in participation in the upper years of secondary school and post-school education among Australian young women over the post-war period.

The trends in Figures 2.5 and 2.6 are both a cause and consequence of low fertility in the State. There are also other factors involved. The incidence of abortion in South Australia since the liberalisation of abortion laws in the early seventies and Figure 2.7 indicates that in recent times there has been a consistent pattern of around one in five pregnancies in the State resulting in an abortion. Clearly it is apparent that abortion is being used as a form of contraception as well as a way of protecting the rights of women.

Figure 2.5: South Australia: Female Labour Force Participation Rates by Age, 1911-2000

Source: ABS Censuses 1911-96; ABS unpublished data

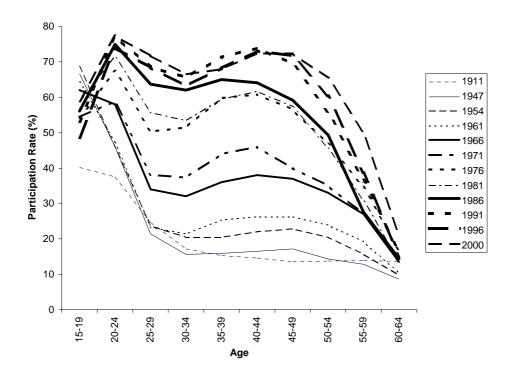


Figure 2.6: Australia: Percent of Males and Females Aged 15-19 in Full-time Education, 1947-96

Source: Australian Censuses 1947-96

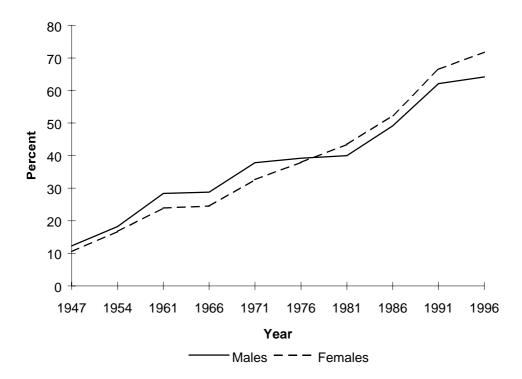
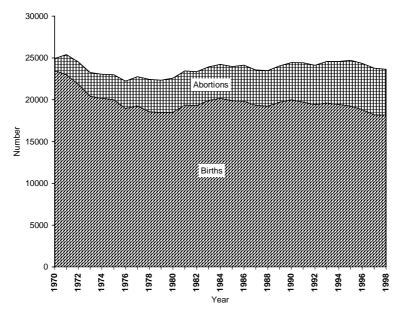


Figure 2.7: South Australia: Number of Births and Abortions, 1970-98

Source: ABS *Births Australia*, various issues; SA Health Commission, Committee Appointed to Examine and Report on Abortions



There is thus a need for improvement in birth control education although a 1995 survey showed that 66.7 percent of Australian women aged between 18 and 49 were taking some form of contraceptive (ABS 1998a, 30). The introduction of the contraceptive pill in the early 1960s undoubtedly has been of great importance in providing women with the ability to control the number of children they have and when they have them.

The emphasis of the present report is upon possible intervention by Government, especially State Government, to influence population growth. In Australia Government concern about low and declining fertility goes back to the early years of federation (Coghlan 1903, Hicks 1978, Santow, Borrie and Ruzicka 1988). This early concern was accompanied by a belief that fertility was an area amenable to policy intervention by Governments (Borrie 1944, Royal Commission on the Decline of the Birth Rate and on the Mortality of Infants in New South Wales 1904). However, the official position of the current Federal Government is that the Government should not have such policies nor indeed should it have an overarching population policy. Nevertheless, it is clear that many Government policies have significant effects on fertility although those effects were not necessarily intended.

Globally, however there has been a lively debate and growing involvement of Governments in policies to influence in contexts where fertility is perceived to be low or declining (McIntosh 1998). Government interventions in this area have been of two types...

- Direct Pro-natalist Policies involving direct attempts to influence fertility through offering incentives to those who have children and disincentives to those who choose to have no children. These types of policies involve cash payments for each child, privileged access to State housing, medical or education services, taxation incentives/disincentives related to children.
- Indirect Pro-natalist Policies which involve interventions which seek to change the environment in which decisions by couples about the number of children they intend to have are made. These are sometimes referred to as 'family friendly' policies.

The latter have attracted some attention in the Australian context. The focus is on policies which facilitate the participation of mothers in the paid workforce outside of the home and promote gender equality in the workplace, home and in society generally. McDonald (1997) has argued that one can recognise a positive relationship between fertility in More Developed Countries and the extent to which those countries facilitate employment of mothers and gender equity:

The countries which through their social institutions make it difficult or unrewarding for women to combine work and family, or which provide incentives for mothers to stay at home rather than to be employed are the countries that have very low fertility. Faced with the choice between an uninterrupted career or having a child and withdrawing from the workforce for an extended period, women in those countries often make the decision not to have the child. In short, where countries continue to support or promote the male bread winner model of the family, fertility falls to very low levels.

Perhaps no country more than Sweden has moved farther away from the male bread winner model of the family. Sweden has been portrayed as one of the world's few post-patriarchal societies but policies which have worked in this direction have a long history in the country. In the 1940s there were policies to enable women to have children without losing access to,

or promotion in, work outside the home (Myrdal, 1941). Considerable attention was focussed upon Sweden when the TFR ceased declining in the late 1970s and started rising in the mid 1980s reaching 2.02 in 1989. Hoem (1990:740-41) argued that these developments:

can in part be attributed to the low key and largely indirect pro natalism of Swedish social policies. I know of no other country with a similar political system and at a comparable stage of industrial development that has so consistently tried to facilitate women's entry to the labour market and their continued attachment to it at minimal cost to child-bearing and child-rearing ... It is tempting to conclude that fertility is responding to the cumulative efforts of the determined expansion in public day care, child benefits, parental leave provisions, parents' rights to part-time work and similar measures.

The evidence regarding the effects of pro-natalist interventions in low fertility situations is that the impacts in increasing fertility are limited. On the other hand, in those countries with so-called 'family friendly' policies, there is definite indications that fertility decline has not been as great as it has in countries where there are low levels of gender equity in the labour market and other institutions and where there are limited supports for those women who chose to have children as well as have substantial work careers. There would seem to be a strong case that where Governments and industry pursue policies and practices which make having children and working outside the home a real option for women through wide availability of childcare, significant maternity and parenting leave arrangements, preservation of seniority and promotion prospects during such leave etc. fertility levels are likely to stabilise at TFRs between 1.5 and 2. They certainly contribute to the strengthening of the two child family size norm in those societies.

However, one would not wish to argue for the implementation of family friendly policies in Australia purely on the basis of their fertility effects although such effects are undoubtedly tangible and positive. One would rather stress that policies and activities that are supportive of women combining work and family should be instigated from the perspectives of improving equity and productivity in Australia. It would appear that young Australian women who wish to work outside the home in present circumstances are faced with the following choices:

- To have children and withdraw from the workforce for at least a substantial period and lose income and security.
- To decide to concentrate fully on career and maximise income and promotion possibilities and not have children.

Young women who attempt to combine work with child-bearing and child raising are faced with a number of barriers. In effect, whereas for men having children is not seen in any way to inhibit career activities and prospects, this is not the case for women who want to do the same. There is a clear gender inequity here which in any society professing to subscribe to equality of opportunity needs to be addressed.

It has been a truism of conservatives in Australia and elsewhere that policies which keep women at home and out of the workforce – the so-called 'male breadwinner' model of the family – lead to increases in fertility. However, the evidence from several countries at the turn of the century is that the opposite is the case. Rindfuss *et al.* (2000), for example,

shows unequivocally that given a stark choice between staying at home and having children and working and having none sufficient women will opt for the latter for overall fertility to come down. The clear path to stabilising fertility in More Developed Countries (or even increasing it slightly) is to give women real choice which allows them certainly to stay at home to raise a family or work and have no children but equally gives them the choice of doing both in the same way that men have such a choice.

It can be argued that Australia in recent years may have seen a shift back toward a male-breadwinner model of the family. For example, it was reported (*The Advertiser*, 10 August 1999: 9) that childcare fees in Australia rose 56 percent between 1991 and 1998. McDonald and Kippen (1999) also indicate there has been a withdrawal of employment conditions favourable to families with young children in industrial agreements and the modification of the tax-transfer system to provide greater benefits to parents who do not work. While women must have the choice of withdrawing from the workforce to bear and raise children, they must also have the choice which men have, that is to have both a full career of working outside the home and having children. For this to occur there are a number of initiatives that are needed in Government, in industry as well as in the family (sharing of household tasks between partners etc.). If this were to occur it almost certainly would lead to at least a stabilisation of Australian fertility at a level higher than that among many European countries and thereby reduce the overall ageing of the population and allow a less disruptive transition to a demographically stable population.

It could well be argued that the types of policies which are most influential in shaping fertility are more within the ambit of the federal than the State Government. This particularly applies to the 'family friendly' policies, which have been referred to above. However, the State can certainly play a role in the development of family friendly policies. It can be and indeed is involved in childcare. It can bring together employers in the State in a summit to develop industrial situations to protect the work of women and develop work practices, which are compatible with women having children if they wish to. Indeed the practices adopted in Europe would indicate that there are significant economic gains for employers to be gained from such innovations. One could recommend that South Australia could become, and indeed style itself, as the 'family friendly State'. This would have a number of favourable consequences...

- It would continue the State's tradition of being at the forefront of social development, equity and lack of discrimination, especially in relation to women. Sweden styles itself as the 'first post-patriarchal State' and has projected intentionally a progressive and innovative image which has assisted its economic as well as social development. In itself such developments would make the State a more attractive place for all Australians, but especially for women
- There can be no doubt that family friendly policies have the capacity to stabilise fertility levels and can even result in a small increase. All surveys in South Australia indicate that women on average want 2 children. They are not achieving this and this is due to institutional barriers, which our economy and society are placing in their way. Removal of these barriers will see the TFR move toward 2. It must be realised that even small movements in the TFR will have much greater effects (negative or positive) on population growth than feasible changes in migration both international and interstate. Hence even small effects on fertility will have a major impact on the State's future population.

• To anticipate some of the later parts of this report, a third advantage of South Australia becoming the 'family friendly State' is that this could be a major plank of a policy to attract people to the State from other parts of Australia, especially those who previously lived in South Australia. It is shown later that the group who are most positively disposed to returning to South Australia are people in the early stages of family formation (aged in their 30s and early 40s). The things which they find attractive in the State are lifestyle elements relating to the stage of the life cycle of the family they are at.

2.5 INTERNATIONAL MIGRATION

It is apparent form Figure 2.2 that net migration has been very volatile in South Australia over the post-war period. The shift from sustained large gains in the first three decades to smaller gains and even net losses subsequently has been the main element in reduced population growth rates although the decline in fertility has also played an important role. This net migration comprises two components – the net gain or loss in exchange with other States and Territories, which is the main focus of the present report, and also net migration from overseas. The scale of both forms of net migration in the period is depicted in Figure 2.8.

With respect to international migration, Figure 2.8 shows heavy gains in the 1947-71 period being replaced with smaller gains over the next quarter century. Table 2.4 shows the pattern of national and State net gain of migrants from overseas since 1996. This shows a clear pattern not only of reduction in the overall intake to the State, but also in the *proportion* of the national intake coming to live in South Australia. In 1996-97 this fell below 4 percent, substantially below its share of the national population (8 percent). Indeed the reduction in international migration net gain has meant that in the mid nineties for the first time since World War I the net overseas migration gain was not enough to compensate for the net loss of people through interstate migration so an overall net migration loss was experienced by the State as is evident in Figure 2.2.

The pattern in 1998 was quite different with South Australia's share of national net migration gains increasing to 5.7 percent, below its proportion of the national population but a share not experienced since the early 1980s. A small part of this may be attributable to the increased activity of the State in the development of Commonwealth/State mechanisms to channel immigrants to settle outside of Sydney-Wollongong-Newcastle, Southeast Queensland and Perth.

The last few years have seen a more concerted effort by the Department of Immigration and Multicultural Affairs (DIMA) to influence where immigrants settle than at any time since the Displaced Persons in the immediate post World War Two period. This takes into account considerable variations between the States and their attitude toward migration.

• New South Wales takes over 40 percent of new immigrants and is keen to reduce the intake into Sydney because it is argued that this places pressure on the city's infrastructure.

Figure 2.8: South Australia: Components of Population Change, 1947-54 to 1996-99

Source: Bell, 1997a, 6; ABS 2000a

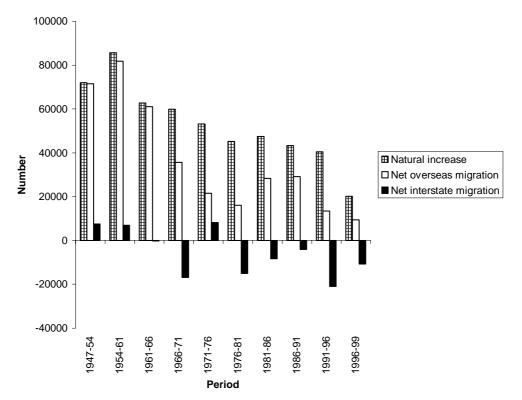


Table 2.4: Net Overseas Immigration¹, Total Australia and South Australia, 1966-99

Source: ABS Overseas Arrivals and Departures Bulletins and Australian

Demographic Statistics Quarterlies, various issues

Year	Australia	South Australia	SA Percentage of Australian			
(ending Dec 31)			Net Migration Gain			
	Number	Number				
1966-70	643,351	64,766	10.1			
1971-75	343,372	28,169	8.2			
1976-80	293,860	10,517	3.6			
1981-85	419,297	27,733	6.6			
1986-90	591,770	26,570	4.5			
1991-95	411,630	17,420	4.2			
1996-97	182,529	6,851	3.8			
1998	111,600	3,327	3.0			
1999	111,195	3,039	2.7			

¹Overseas Immigration - 1966-73 = Permanent Movement

1974-99 = Permanent and Long-Term Movement

- Victoria attracts a disproportionately large share of the intake (25 percent) but the Government is keen to attract more migrants to the State generally and also to Melbourne.
- Western Australia attracts a disproportionately large share of migrants with Perth accounting for most.
- In Queensland the bulk of migrants settle in the heavily populated southeast corner although as a State its share of the intake is disproportionately low.
- South Australia with over 8 percent of the population attracts between 4 and 5 percent of the nation's migrant intake. Its Government has been the leader in pressuring the Federal Government to attract a greater share of immigrants to the State.
- Tasmania has 2.7 percent of the national population but attracts less than 1 percent of new immigrants.

In May 1996 the annual meeting involving Commonwealth, State and Territory Ministers for Immigration and Multicultural Affairs established a working party on regional migration which could herald a new era in patterns of migrant settlement. The working party examined ways in which a higher proportion of migrants might settle in regional Australia. They concluded that:

- there is a greater capacity to influence the location decisions of skilled migrants than family migrants since the former are less influenced by the location of relatives and friends than the latter
- skilled migrants have better employment outcomes and bring substantial economic benefits to regional Australia.

In March 1997 the relevant Commonwealth, State and Territory ministers for immigration and multicultural affairs established a working party on regional migration which could herald a new era in patterns of migrant settlement. The working party examined ways in which a higher proportion of migrants might settle in regional Australia. They concluded that regional migration policies should:

- be sufficiently flexible to allow States and Territories to use these selectively and in a manner appropriate to their own needs;
- be non-discriminatory;
- be grounded in the findings of research; and
- not impact negatively on employment and training opportunities for existing residents.

A number of initiatives have been taken to attract migrants to areas which are currently receiving small intakes. This applies not only to States and State Governments but regions and regional development organisations. These initiatives are mostly via a number of new sub-categories of migration entry to Australia and in general they are applied to all areas of Australia outside the three designated areas which are currently attracting a disproportionate share of incoming migrants and are shown in Figure 2.9. These are:

- the Sydney-Newcastle-Wollongong conurbation
- southeastern Oueensland
- Perth

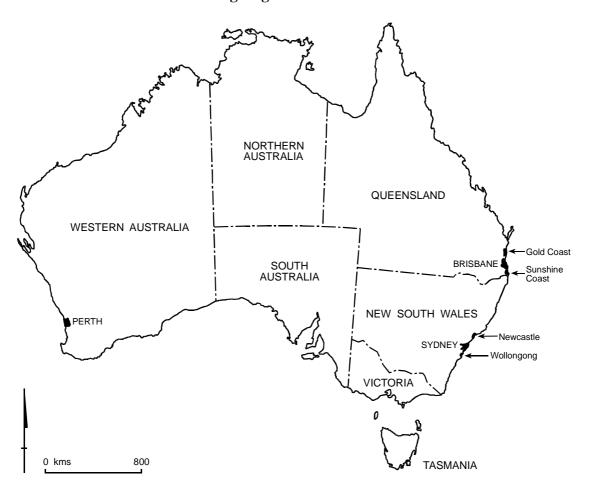
All other areas can take advantage of the special schemes which include the following:

• Regional Linked Category - introduced on 1 November 1996 this allowed for sponsorship of skilled relatives (brothers, sisters, nephews, nieces, non-dependent

children, working age parents, first cousins and grandchildren) to the designated areas. The category is not points tested but relies on the sponsor and applicant meeting certain criteria:

- a) the sponsor must have lived in the designated area for at least 12 months and not been in receipt of a social security benefit for more than 2 weeks in the last 12 months.
- b) the applicant must have a recognised Australian qualification, at least functional English if their occupations are on the Occupations Requiring English (ORE) list and be less than 45 years old.

Figure 2.9: Australia: Designated Areas Currently Attracting a Disproportionate Share of Incoming Migrants



• Regional Sponsored Migration Scheme (RSMS) - allows employers in regional Australia to nominate overseas personnel for permanent entry to Australia where the employer has not been able to recruit suitable skilled personnel through the local labour market. The nomination must be for a genuine full time vacancy for a two year contract, be skilled and have Australian standard wages and conditions. The applicant must have an Australian recognised qualification, functional English and be aged less than 45.

- Regional Established Business in Australia (REBA) came into effect on 1 July 1997, allows people temporarily in Australia who have established a business venture in the designated area to apply for permanent residence. They must have owned and operated the business for at least two years, have at least a 10 percent holding in the business, have net assets of at least \$200,000 of which at least \$75,000 must be invested in the business, be actively involved in the business and meet the pass mark on the Business Skills Points Test (15 bonus points are available to those in a designated area).
- Bonus Points for Business Skills Applicants States and Territories can sponsor Business Skills Applicants applying as Business Owners and they are considered by the Business Skills Points Test which assesses their record and assets. They receive 15 bonus points if they are sponsored by a designated State. Sponsorship also attracts other concessions.
- State/Territory Nominated Independent Scheme (STNI) was introduced on 30 October 1997, and enables any State or Territory to sponsor up to 200 skilled migrants and their families in the independent skilled category each year. The States/Territories are required to carry out an audit to establish what skills are in short supply and then select applicants accordingly.
- Skill Matching this scheme was introduced on 1 November 1996, and builds on the fact that there are many skilled migrants applying under the Independent Migration Category whose qualifications are assessed as meeting Australian standards but they fail to meet the pass mark in the points test. Those just below the cut off (above 95) can fill out a skill matching form and they are included in the Skill Matching Data Base for selection to States and Territory Governments. This can be used then as a resource for the RSMS scheme. The use of Skill Matching saw a doubling of the RSMS migrants and STNI schemes. The RSMS doubled from 159 in 1996-97 to 314 in the first eight months of 1997-98.

These initiatives were beginning to have some effect by 1999, most notably in South Australia which has wholeheartedly embraced the new categories. However, the numbers remained small and did not yet have any significant effect in the overall pattern of migrant settlement in Australia. On July 1, 1999, a new battery of measures were initiated in order to encourage greater migration to regional Australia.

- Family Sponsored Migration before 1 July 1999 applicants for Family Migration to Australia were treated equally regardless of where their family sponsors lived. This is now changed with different conditions applying where sponsors are in a designated area (i.e. everywhere except urban Brisbane, Sunshine Coast, Gold Coast, Perth, Sydney, Newcastle and Wollongong). Where sponsors are in these areas a wider range of relatives can apply for family sponsored migration, namely:
 - a) non-dependent child
 - b) parent
 - c) brother or sister
 - d) niece or nephew
 - e) grandchild.

Applicants do not have to pass the points test but must have:

- post-secondary education;
- vocational English or their sponsor/caretaker to pay for English training; and
- be less than 45 years old.

Skill Matching Visa was also introduced on 1 July 1999. This applies to people who
are in the Skills Matching Data Base - i.e. those who have obtained a points score of
between 90 and the passmark of 105. States or regions or individual employers can
nominate individuals from the data base and they will then be automatically
considered under the RSMS.

Table 2.5: Distribution of Migrants Granted Visas Under State Specific Migration Mechanisms in 1998-99 and 1999-2000

Source: DIMA 2000

1998-99									
Category	NSW	SA	VIC	WA	NT	QLD	TAS	ACT	TOTAL
RSMS	39	436	43	67	41	71	45	23	765
STNI	0	169	0	0	0	0	0	0	169
Regional –	2	29	9	8	4	8	0	7	67
Linked									
SAL *	77	396	801	128	17	199	40	86	1,744
SSBS **	15	4	23	9	0	2	6	0	59
REBA	0	0	0	0	0	0	0	0	0
TOTAL	133	1,034	876	212	62	280	91	116	2,804
1999-00									
RSMS	18	373	30	69	33	60	65	16	664
STNI	0	9	0	0	0	0	0	0	9
Regional –	9	16	131	5	9	15	0	10	195
Linked									
SAL *	118	297	1,485	176	23	185	23	77	2,384
SSBS **	12	4	13	0	0	5	4	6	44
REBA	0	3	0	0	0	0	0	0	13
TOTAL	157	702	1,659	250	65	265	102	109	3,309

^{*} refers to applicants under this category who obtained bonus points because their sponsor lived in a designated area.

Acronyms

RSMS - Regional Skilled Migration Scheme

STNI – State/Territory Nominated Independent

SAL - Skilled-Australian Linked

SSBS - State/Territory Sponsored Business Skills

REBA – Regional Established Business in Australia

What have been the effects of these initiations to encourage regional settlement of international migrants arriving in Australia? Table 2.5 shows that the numbers of immigrants coming to Australia under State-specific migration mechanisms increased by 18 percent between 1998-99 and 1999-2000 while the total intake increased by only 3.4

^{**} includes applicants processed under offshore subclass 129 (State/Territory Sponsored Business Owner), offshore subclass 130 (State/Territory Sponsored Senior Executive), onshore subclass 842 (State/Territory Sponsored Business Owner) and onshore subclass 843 (State/Territory Sponsored Senior Executive).

percent. Nevertheless, it still only comprised 4.7 percent of the total programme and substantially less if one considers the total net gain by overseas migration in that year. South Australia accounted for 28.4 percent of the 1999-2000 arrivals under the programme while Victoria and South Australia accounted for 71.4 percent of settler arrivals under the programme in 1999-2000. Hence South Australia has been a major beneficiary of the Regional Migration Program.

Accordingly, there are now a battery of migration schemes oriented to attract migrants to regional areas. Whereas in the past they have been restricted to a small points bonus being given to the applicants for settling in a designated area the new schemes offer a more substantial bonus while still ensuring a relatively highly skilled intake. The fact remains, however, that the research indicates that there are two major factors which shape where a migrant coming to Australia settles:

- the presence of family members and friends; and
- the availability of work.

In fact, many areas of the designated 'regional' zone for special immigration programmes tend to:

- have very small numbers of recent migrants; and
- have depressed economies, high unemployment and limited economic possibilities.

The Minister described the impacts of the schemes to attract migrants to regional areas as 'patchy' (DIMA 1999). There is no doubt that the programmes introduced in the past four years will divert some newly arrived migrants to regional Australia, and to South Australia, but the numbers are unlikely to be substantial and it would seem unlikely that there will be a major redistribution occur in the main destination areas of migrants. The greatest impact is likely to come not so much in the demographic effects of these schemes but in the economic impacts. The extent to which the new migrants attracted by the scheme contribute to the economic development of these areas.

Table 2.6 indicates where newly arriving migrants in Australia indicate they intend to settle (from the data on arrival cards) and it shows that New South Wales and Victoria account for the destinations of three-quarters of immigrant settlers arriving in Australia. Hence while the pattern of *internal* migration in Australia is dominated by Queensland because this is where there is the greatest perceived availability of jobs, international migration is strongly focussed on Sydney because it is the hub of most social networks in Australia of newly arrived migrants. As a result it is unlikely that South Australia will see a massive change in the numbers of immigrants which settle there. Table 2.6 shows that its share of newcomers has been stable in recent years despite the Regional Migration Programs.

This does not mean, however, that South Australia cannot increase its share of overseas migrants. Indeed, targeting particular groups who have existing linkages in South Australia could result in a small but significant increase. Considering only where immigrants settle it is difficult to see a massive change occurring since migrants will continue to be attracted to where they have a network of family and friends and to where it is perceived that economic opportunities exist. Newbold (1999), however, points out that the settlement system of the overseas-born is a dynamic one which is 'continuously restructured in response to changes

Total net population gain from overseas movement for 1999-2000 will be substantially higher because of the number of long-term arrivals out numbering the number of long-term departures and the DIMA statistics quoted here only apply to settler arrivals. The data here also exclude New Zealand arrivals and refugee/humanitarian arrivals.

in economic conditions, the immigration of earlier arrivals belonging to the same ethnic or national group or the arrival of new immigrants that reinforce the existing community. Shifting immigration policies, new information on alternative locations, employment opportunities, housing, hostility, racism (real or imagined) and/or cultural effects also alter the settlement system.'

Table 2.6: Intended State of Residence of Settler Arrivals, 1989-99

Source: DIMA *Immigration Update*, various issues

Year	Number of Settler	NSW	Vic	Qld	SA	Tas
	Arrivals	%	%	%	%	%
1989-90	121,227	38.9	26.2	13.1	4.9	0.7
1990-91	121,688	39.1	26.4	13.3	4.9	0.6
1991-92	107,391	41.0	25.7	14.1	4.5	0.6
1992-93	76,330	42.0	25.0	14.3	4.6	0.5
1993-94	69,768	44.3	22.8	14.7	4.6	0.7
1994-95	87,428	43.5	22.8	15.1	4.3	0.6
1995-96	99,139	44.7	22.5	15.4	3.9	0.6
1996-97	85,752	43.4	21.3	17.1	3.9	0.5
1997-98	77,327	41.0	21.0	19.5	4.0	0.5
1998-99	84,143	41.8	20.5	19.0	3.9	0.5

In fact, as Newbold (1999) shows in the US case, the adjustment of migrants is a segmented process with each group having a distinctive settlement pattern and different potential to locate outside of the current major centres of concentration. Accordingly in the United States centres such as Seattle and Phoenix which were previously not major migrant destinations, have become important secondary foci of settlement to Los Angeles, Chicago, Miami and New York. This is because the set of factors influencing the most recent migrants is different to those of the past. Hence it can be expected that just as Adelaide, for example, was able to attract more than its proportionate share of overseas arrivals in the 1950s and 1960s because it was a dynamic growing economy, should it achieve such a status again it will again attract a greater share of migrant arrivals. However, the point is that there needs to be a change in the context of migration for this to occur. Policy interventions will certainly result in a small proportion of the intake being influenced to settle outside the major centres but for a substantial change to occur it will take a major shift in the distribution of economic opportunities. The message from the United States experience is that in fact if there is a shift in internal migration toward a particular new focus (e.g. Phoenix) then international migration will follow sometime later. In fact in Australia, Queensland has tended to follow this pattern. Queensland for most of the postwar period has not received its proportionate share of overseas arrivals. However, it has had the most dynamic economy of any of the Australian States and as a result has been the predominant focus of internal migration in Australia (Rowland 1979, Jarvie 1989, Maher and McKay 1986, Bell 1972,1995, Bell and Hugo 2000). Despite this for several decades, Queensland continued to receive less than its share of overseas migrants. However, it will be noted in Table 2.6 that in the late 1990s Queensland has increased its share of overseas

arrivals. Hence it would seem that substantial increases in the share of overseas arrivals *follow* rather than *precede* increased levels of internal migration gain.

Hence it would seem that if so called lagging regional areas such as South Australia desire to increase their share of the national population they may be more effective in attempting to attract people from elsewhere in Australia than from overseas. The above raises the larger question as to whether some of the efforts currently being expended in attracting newly arrived immigrants to areas of Australia perceived to have population growth which is too low may be more productively directed at the established Australian resident population in areas experiencing pressures of population such as diseconomies of scale, environmental pollution, spiralling land and home costs, congestion, accelerating overhead costs etc. It can be legitimately questioned that States and regions need to have population growth if they are to become prosperous but given that some areas wish to reverse current net migration losses or increase net migration gains it may be more productive to attempt to attract established Australians from elsewhere than to focus purely on newly arrived migrants. To take the case of South Australia, for example, one could make the following argument for adopting this strategy:

- the target populations, including people living in the mainland eastern States, are much more likely to have information about the State than newly arrived migrants. Most will have visited Adelaide and many may even have originated from South Australia or have relatives and friends there;
- the targets are more likely to be aware of the advantages of living in South Australia in terms of cheaper house and land prices, lower operating costs for companies, less congestion and lifestyle advantages in the State;
- the development of modern transport and information technology is making it less necessary for businesses to be physically located in downtown Sydney or Melbourne to interact effectively with others located in those cities.

Hence a programme aimed at attracting particular groups, especially small and medium scale entrepreneurs from areas in the eastern States experiencing some stress may be more effective in increasing net migration gains if this is considered necessary than in putting all available efforts and resources into attracting newly arrived migrants. This is supported by the experience of contemporary North America and Europe whereby there has been substantial decentralisation of people and economic enterprises away from large cities. Most of this decentralisation has involved established citizens of those countries while newly arrived migrants tend to settle in a few of the largest cities.

The encouragement of interstate migration to the State would seem to be best targeted at two elements...

- Attract small and medium scale entrepreneurs from those States by the lower costs
 of labour, materials, lower cost of living, lifestyle advantages etc. and take
 advantage of the high costs in Sydney and Melbourne and modern developments in
 information technology which allow them to maintain close contact with markets
 and suppliers in Sydney and Melbourne.;
- Secondly it has been recognised that there has been a substantial exodus of South Australians, predominantly as young adults, to the eastern States since the mid 1970s and that there is potential to encourage a proportion of them to return to South Australia.

Underlying both of the above programmes is the belief that Australia has in general experienced less decentralisation of its national population away from its major cities of Sydney and Melbourne and their immediate hinterlands than has occurred in many other developed countries. This would suggest that there are elements which could lead to a greater overall change in population distribution in Australia over the coming decades. These include:

- the development of information technology which means that people and industry are less tied to location in major urban areas than in the past
- the shift in economy away from employment in manufacturing and agriculture to employment in service industries
- the increasing cost differential in housing, land and infrastructure between different parts of Australia
- the growing evidence of environmental stress and diseconomies in heavily populated areas like Sydney.

This may result in locations such as Adelaide which have been seen as peripheral being more able to compete for people and companies with larger, more centrally located cities.

Before examining strategies to encourage interstate migration to South Australia however we need to examine in detail the existing patterns of interstate migration in Australia and especially how they have impinged on South Australia. Hence Chapter Three will examine patterns of interstate migration to and from South Australia in the last decade. Prior to this examination however it is necessary to consider one final important aspect of the population of South Australia – its age structure.

2.6 CHANGING AGE STRUCTURE

The demographic trends outlined above have had profound effects on the age structure of South Australia. This is important because the level and nature of demand for virtually all goods and services are influenced by age structure. The declines in fertility and immigration discussed above have meant that South Australia's population was younger than that of the nation in the 1950s and 1960s when Australia had a young population, and also that the State's population was older than the nation in the 1980s and 1990s when Australia's South Australia, as a result of its lower fertility, population has been ageing. disproportionately low immigration gain and net interstate migration loss has an older population than that of the nation as a whole with 13.8 percent aged 65 years or over in 1996 compared with 12.0 percent nationally and 14.3 percent in 1999 compared with 12.2 percent nationally. Moreover, the State received a disproportionately large number of young adult interstate and international migrants in the 1950s and 1960s. Most of these have remained in South Australia and 'aged in place' resulting in an exacerbation of the national ageing trend in the State. This is reflected in Figure 2.10 which shows the age structure of the State in several census years since the war and the projected population in 2011. This indicates how the pyramid has been dominated by the high fertility of the baby boom years which has produced a 'bulge' which has moved inexorably up the age pyramid followed by the smaller numbers of the baby bust years born in the 1970s, 1980s and 1990s. Hence, the State's age structure is being transformed from a pyramid to a pillar in shape. This of course reflects considerable change in the number over time entering education, entering the workforce, needing housing etc.

The past, present and impending age structure situation in South Australia is shown in Table 2.7 which shows that the State's median age has increased from 23.9 in 1911 to 36.7 currently and will be 46.8 by 2031. Meanwhile, the percent aged 65 years and over has increased from 4.6 to 14.4 and will increase to 26.9 in 2031. The table shows that the ratio of dependent population (aged 0-14 and 65+) to that in the working ages (15-64) has in fact decreased progressively from 61.1 percent in 1954 to 51.6 percent currently and will continue to decrease to 50.1 percent in 2011. Thereafter however, the passage of the babyboom cohort into the older age groups will see a rapid growth of the dependency ratio in the population.

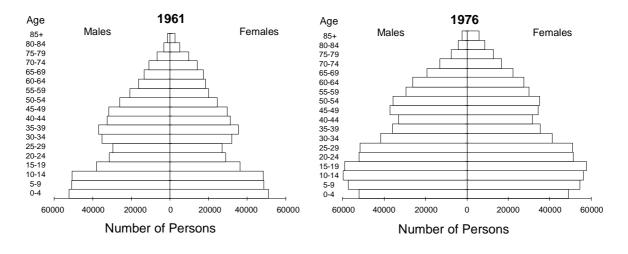
Table 2.7: South Australia: Summary Measures of Age and Sex Composition 1911-96, Preliminary Figures 1999 and Projected Measures 2001-31

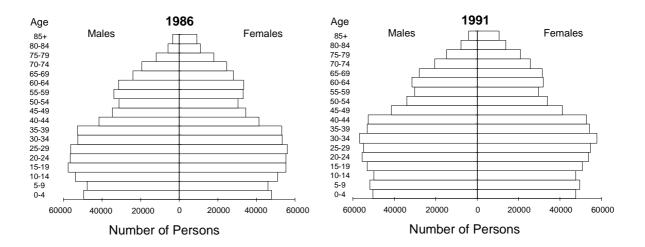
Source: ABS 1911, 1954, 1976, 1986, 1991 and 1996 Censuses; ABS 2000a; ABS 2000b

	Year											
	1911	1954	1976	1986	1991	1996	1999	2001	2011	2031		
DEPENDENCY RATIO (per	DEPENDENCY RATIO (percentage of population 15-64 years)											
Youth (0-14 years)	48.3	46.6	41.2	33.1	31.8	31.3	29.8	28.9	24.7	23.9		
Elderly (65 yrs & over)	7.3	14.4	14.2	17.4	18.9	21.2	21.8	22.0	25.4	45.7		
Aged (85 yrs & over)	0.3	0.7	1.0	1.4	1.4	2.1	2.4	2.5	3.6	6.2		
Total (0-14 and 65+)	55.6	61.1	55.3	50.5	50.7	52.8	51.6	51.0	50.1	69.6		
MEDIAN AGE (years)	23.9	30.7	28.7	32.0	33.5	34.9	36.7	37.4	40.9	46.8		
PERCENT AGED 65+	4.6	8.9	9.1	11.6	12.5	13.8	14.4	14.5	16.9	26.9		
SEX RATIO (Males per 100 f	emales)											
Age group (years)												
0-14	102.4	104.8	105.5	104.9	104.7	105.3	105.4	105.4	105.2	105.6		
15-24	102.9	109.6	102.0	103.8	103.3	103.6	105.1	104.7	105.5	105.0		
65 & over	96.4	80.0	66.9	71.9	74.3	74.6	77.3	77.2	81.1	84.6		
85 & over	76.5	60.1	17.1	37.3	41.2	40.2	43.6	44.3	50.4	62.1		
Total	104.4	102.7	99.3	97.9	97.4	96.8	97.8	97.9	98.1	97.8		

Figure 2.10: South Australia: Age and Sex Structure of the Population, 1961 to 1996 and Projected 2011

Source: ABS 1961-96 Censuses and ABS 2000b





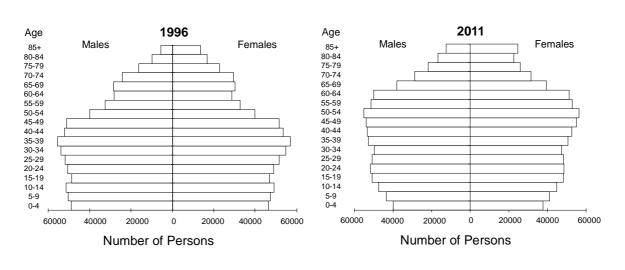
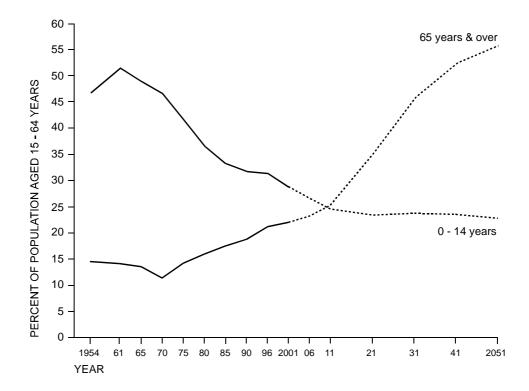


Figure 2.11 shows that in the middle of the second decade of next century the number of elderly dependents will outnumber the number of children in the State for the first time in history. The ageing of the population has brought with it a change in the sex ratio of the population. While males outnumber females in the State in the entire period since the initiation of white settlement this was changed in the mid 1970s when women outnumbered men. It will be noted in Table 2.7, however, that in recent years the sex ratio among the elderly has begun to increase as a result of the greater improvement in life expectancy of older men than older women.

There are some distinctive differences between the age structures of South Australia and Australia as a whole and these are evident in Figure 2.12 which overlays the two relevant age pyramids in 1999. The most striking difference lies in the significant underrepresentation in the South Australian structure of people age under 40 and an overrepresentation of older people.

Figure 2.11: South Australia: Actual and Projected Youth and Elderly Dependency Ratios, 1954-2051





Indeed, whereas 41.9 percent of all Australians were aged less than 40 in 1999 this applied to only 44.8 percent of South Australians. This is clearly the result of continued substantial outmigration from South Australia of young adults, especially school leavers and first time job seekers.

Australia's population is ageing with the proportion of the population aged over 65 years increasing from 8.3 percent in 1971 to 12 percent in 1996. Table 2.8 shows that over the same period the proportion of South Australia's population aged over 65 went from being only slightly above the national average (8.5 compared with 8.3 percent) to well above it (13.9 compared to 12 percent). Hence while South Australia's total population grew at well below the national average over the last 15 years its aged population grew at an annual rate of 3.4 percent, six times as fast as the total population!! This is a faster rate of growth, too, than the national aged population so that South Australia's population is ageing faster than the nation as a whole. This is due to two factors...

- The fact that there was a net influx of people from interstate and overseas in the 1947-54 period. At that time most were young adults and they have aged in place.
- The continuous net loss of young adults through interstate migration, as will be shown in Chapter Three.

Figure 2.12: Australia and South Australia: Age and Sex Distribution of the Population, 1999 (preliminary)

Source: ABS 2000a

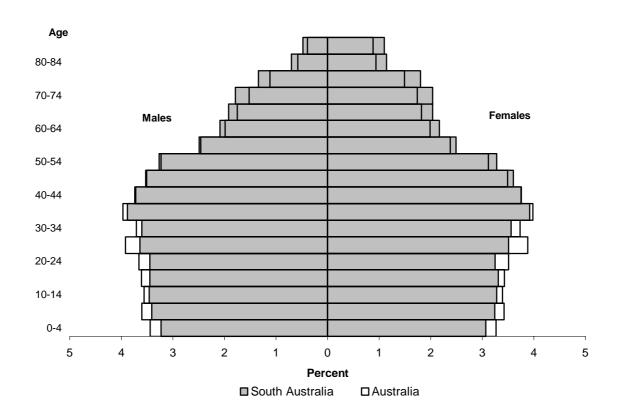


Table 2.8: Australian States and Territories: Percentage of Population Aged 65 and Over, 1971, 1981, 1991 and 1996

Source: ABS Censuses 1971, 1981, 1991 and 1996

States and Territories	1971	1981	1991	1996	Change 1981-96
Numbers					
New South Wales	391,116	519,595	681,179	762,902	243,307
Victoria	294,961	374,256	469,876	525,413	151,157
Queensland	165,901	235,127	345,441	398,515	163,388
South Australia	99,600	134,889	177,825	197,265	62,376
Western Australia	76,184	111,390	155,778	179,753	68,363
Tasmania	31,037	40,864	51,771	56,640	15,776
Northern Territory	2,139	3,753	8,096	9,277	5,524
ACT	4,057	9,525	17,190	21,057	11,532
Australia	1,064,995	1,429,933	1,907,156	2,150,895	720,962
Percent					
New South Wales	8.5	10.1	11.9	12.7	+2.6
Victoria	8.6	9.8	11.1	12.1	+2.3
Queensland	8.8	10.2	11.6	12.0	+1.8
South Australia	8.5	10.5	12.7	13.9	+3.4
Western Australia	7.4	8.7	9.8	10.5	+1.8
Tasmania	8.1	9.8	11.4	12.4	+2.6
Northern Territory	2.1	3.0	4.6	4.9	+1.9
ACT	2.7	4.3	6.1	7.1	+2.8
Australia	8.3	9.5	11.3	12.0	+2.2

2.7 PROJECTED POPULATION GROWTH IN SOUTH AUSTRALIA

Australia's population will continue to grow over the next two decades. The extent of growth will be determined by future trends in the fertility, mortality and international migration trends outlined above. The Australian Bureau of Statistics (ABS) every three years or so releases a set of national population projections. The most recent set (ABS 2000b) are based on the results of the 1996 census and adopt a series of assumptions which are all based largely on the experience of Australia's population in the first half of the 1990s. The projections had a standard mortality assumption, two fertility assumptions and net overseas migration gains of 110,000, 90,000, 70,000 and zero. This results in 8 separate projection for Australia's future population and they are depicted in Table 2.9. If we disregard the highly unrealistic zero immigration scenario, they result in Australia's population being between 21.06 and 21.71 million in 2011, 22.44 and 23.83 million in 2021 and 24.06 and 28.2 million in 2051. The ABS has identified three of the projections as high I, low III and medium II projections and these are shown in Table 2.9 and Figure 2.13.

The 1986-1996 rate of improvement in life expectancy of 0.30 years per year for males and 0.22 years for females continues for the next five years and then gradually declines, resulting in life expectancy at birth of 83.3 years for males and 86.6 years for females in 2051. After this it remains constant until 2101.

⁸ 1) The fertility rate remains at 1.75 babies per woman throughout the projection period (high assumption).

²⁾ The total fertility rate declines to 1.6 babies per woman in 2008, and then remains constant (low assumption).

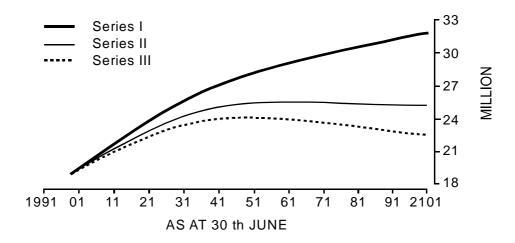
Table 2.9: Projected Population, Varying Component Levels - Australia

Source: ABS 2000b

					as at 30 June				20:	51	
			2000	2001	2011	2021	2051	Crude birth rate	Crude death rate	Growth rate	Median age
Total fertility rate	Net overseas migration	Series	'000'	'000	'000'	'000	'000	rate	rate	%	years
1.75	110 000	I	19 207.2	19 444.7	21 705.4	23 825.9	28194.7	10.4	10.8	0.4	43.6
	90 000		19 207.2	19 432.5	21 468.6	23 329.0	26795.1	10.3	11.1	0.3	44.0
	70 000		19 207.2	19 422.4	21 234.3	22 835.1	25398.5	10.1	11.4	0.1	44.5
	0		19 087.9	19 205.5	20 199.5	20 858.9	20126.9	9.4	13.3	-0.4	47.4
1.6	110 000		19 207.7	19 433.5	21 523.6	23 415.5	26760.9	9.3	11.3	0.2	45.5
	90 000	II	19 207.7	19 421.3	21 288.8	22 926.4	25408.5	9.2	11.7	0.1	46.0
	70 000	III	19 207.7	19 411.2	21 056.5	22 440.2	24059.0	9.9	12.0	0.0	46.5
	0		19 083.4	19 194.4	20 031.1	20 496.2	18974.7	8.2	14.1	-0.6	49.7

Figure 2.13: Projected Population, Australia

Source: ABS 2000b



The projections for South Australia adopted modified assumptions to take account of the different demography. These projections are based very heavily on the Australian experience (and the South Australian experience) of the first half of the 1990s. From the South Australian perspective these were exceptional years in its history. This was a period of unprecedentedly low overseas migration gains and heavy interstate migration losses. The projections simply take this experience and project it forward into the next half century. They must not be interpreted as predictions. They suggest that the economically worst postwar five year period in the State's postwar history following the collapse of the State Bank will continue for a half century - a most unlikely scenario. Nevertheless it is indicative to look at the results of the projections in the context of the ageing of the population.

The main differences in the assumptions used in the projections for South Australia were firstly with respect to fertility. The average differentials in fertility for 1996-98 (ie 96.9 percent of the national fertility level) were maintained. Hence for SA the two fertility assumptions are...

- That fertility is maintained at 1.7 throughout the projection period.
- The TFR declines to 1.55 in 2008 and thereafter is constant.

Source:

ABS 2000b, 63

With respect to overseas migration the average share of permanent movement, long term movement and category jumping for the period 1996-97 to 1998-99 was adopted. Hence the State was allocated 3.5 percent of the total assumed net migration gain.

Interstate migration assumptions are crucial in the State projections. Due to the volatility of this movement three long term assumptions were provided for each State providing high, low and medium levels of interstate migration. The medium assumption is the average for the last three decades with weight given to the last decade. The low and high assumptions 'reflect the variability in the historical data, and give a plausible range of projection outcomes' (ABS, 2000b, 59). The resultant South Australian interstate migration assumptions are shown in Table 2.10 and all indicate that net interstate migration loss will continue.

Table 2.10: ABS Population Projections Assumed Net Interstate Migration from South Australia 1998-2051

	,								
Year	Net Interstate Migratio	Net Interstate Migration ('000)							
	<u>Observed</u>								
1998	-3.3								
1999	-2.9								
	Assumption 1 (High)	Assumption 2 (Medium)	Assumption 3 (Low)						
2000	-3.5	-3.5	-3.5						
2001	-3.7	-3.3	-2.8						
2002	-3.9	-3.1	-2.1						
2003	-4.1	-2.9	-1.4						
2004-51	-4.5	-2.5	-0.5						

The full range of population scenarios for South Australia are presented in Table 2.11 and Figure 2.14. It will be noticed that *all* scenarios envisage the State experiencing a decline in population by the middle of the present century. The most optimistic scenarios are those in which the net interstate migration loss is lowest, and the greatest they see the population increasing by 2051 over 2000 is around 70,000 people.

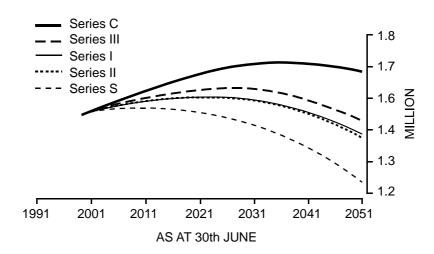
Table 2.11: Projected Population, Varying Component Levels – Total South Australia

Source: ABS 2000b

Sour	ce:	ABS	S 2000b										
						a	s at 30 June				20	51	
	Net overse	eas migration	1		2000	2001	2011	2021	2051	Crude birth	Crude death	Growth rate	Median age
Total Fertility	National	To SA	Net internal migration	Series	000'	'000'	'000	'000	'000	rate rate	rate rate	%	years
rate 1.7	110000	3900	-4500	A(I)	1 500.2	1 506.9	1 547.4	1 563.6	1 423.1	8.9	14.2	-0.6	48.3
			-2500	В	1 500.2	1 507.3	1 567.0	1 606.8	1 540.6	9.1	13.7	-0.4	47.6
			-500	C	1 500.2	1 507.8	1 587.3	1 650.9	1 659.9	9.2	13.2	-0.2	46.9
	90000	3200	-4500	D	1 500.2	1 506.4	1 538.9	1 545.6	1 373.1	8.8	14.5	-0.7	48.7
			-2	E	1 500.2	1 506.8	1 558.4	1 588.8	1 490.3	9.0	14.0	-0.5	48.0
			-500	F	1 500.2	1 507.3	1 578.7	1 632.9	1 609.3	9.1	13.5	-0.3	47.3
	70000	2400	-4500	G	1 500.2	1 506.1	1 530.4	1 527.9	1 323.7	8.7	14.9	-0.8	49.2
			-2500	H	1 500.2	1 506.5	1 550.0	1 571.0	1 440.6	8.9	14.3	-0.5	48.4
			-500	I	1 500.2	1 507.0	1 570.3	1 615.1	1 559.4	9.0	13.8	-0.4	47.7
	0	0	-4500	J	1 496.3	1 498.8	1 494.5	1 459.0	1 140.9	8.0	16.5	-1.2	51.8
			-2500	K	1 496.3	1 499.2	1 514.1	1 502.1	1 256.5	8.3	15.8	-0.9	50.7
			-500	L	1 496.3	1 499.7	1 534.3	1 546.1	1 374.0	8.5	15.1	-0.7	49.8
1.55	110000	3900	-4500	M	1 499.9	1 506.1	1 535.5	1 537.9	1 345.5	7.9	14.9	-0.7	50.4
			-2500	N	1 499.9	1 506.5	1 554.9	1 580.5	1 459.1	8.1	14.4	-0.5	49.7
			-500	O	1 499.9	1 507.0	1 575.1	1 624.2	1 574.4	8.2	13.9	-0.4	49.1
	90000	3200	-4500	P	1 499.9	1 505.7	1 527.0	1 520.2	1 297.2	7.8	15.3	-0.8	50.9
			-2500	Q (II)	1 499.9	1 506.1	1 546.4	1 562.8	1 410.5	7.9	14.7	-0.6	50.2
			-500	R	1 499.9	1 506.6	1 566.6	1 606.4	1 525.5	8.1	14.2	-0.4	49.5
	70000	2400	-4500	S	1 499.9	1 505.3	1 518.6	1 502.6	1 249.3	7.7	15.7	-1.0	51.5
			-2500	T	1 499.9	1 505.7	1 538.0	1 545.3	1 362.3	7.8	15.1	-0.7	50.6
			-500	U (III)	1 499.9	1 506.2	1 558.2	1 588.9	1 477.1	8.0	14.5	-0.5	49.9
	0	0	-4500	V	1 495.9	1 498.0	1 483.0	1 434.9	10 72.8	7.0	17.5	-1.5	54.2
			-2500	W	1 495.9	1 498.4	1 502.5	1 477.5	1 184.6	7.3	16.7	-1.1	53.1
			-500	X	1 495.9	1 498.9	1 522.6	1 521.0	1 298.0	7.5	16.0	-0.9	52.1

Figure 2.14: Projected Population, Total South Australia

Source: ABS 2000b



Focusing on the high, low and medium scenarios of the ABS, under the high scenario, assuming the medium pattern of interstate migration loss, the population would increase from 1.5 million in 2000 to 1.57 in 2011 and 1.61 in 2021 and decline to 1.54 in 2051. The medium projection sees increases to 1.55 million and 1.56 and a decrease to 1.41 while the figures for the low projections are 1.54, 1.55 and a decrease to 1.36 million.

What do the projections mean for the age structure? For Australia we will go from a current median age of 34.3 to between 38.1 and 38.6 in 2011, 40.1 and 41.1 in 2021 and 43.6 and 44.5 in 2051. For South Australia the median age will rise from the present level of 35.9 to between 40.3 and 41.2 in 2011, 42.8 and 44.5 in 2021 and 48.3 and 50.6 in 2051. The proportion aged 65 and above will rise from the present level of 14.4 percent to 16.9 percent in 2011, between 21.9 and 22.1 percent in 2021 and 29.9 and 31.1 percent in 2051. Table 2.12 shows the outlook for the State's ageing population under the middle projection scenario. This indicates that there will be relatively slow growth of the State's aged population up to the early years of next century but it will then gather pace and be most rapid when the baby boom birth cohorts begin to enter the 65+ age group. Hence the 65+ age group will be 22.1 percent bigger than at present in 2011, 61.1 percent bigger in 2021 and more than twice as large in 2051. However, the growth of the 'old-old' 75+ population will be much more rapid, increasing from 6.6 percent of the present population to 18.3 percent in 2051.

Table 2.12: South Australia: Projected Growth of 65+ Population, Series II Projection

Source: ABS 2000b

Year	Population Age	d 65 and Over	Population Aged 75 and Over		
	No.	%	No.	%	
1999	214.3	14.4	97.8	6.6	
2001	219.7	14.6	104.7	7.0	
2011	261.7	16.9	123.1	8.0	
2021	345.2	22.1	152.2	9.7	
2051	439.1	31.1	257.9	18.3	

It must be stressed that while the projections of the total population presented above have to be questioned, that of the older population must be accepted as much more robust, especially over the next quarter century. These people are already in South Australia although many are not yet in the older age groups. Hence this is the pattern we are likely to have to deal with in our policy making and planning.

2.8 CONCLUSION

South Australia's population has changed dramatically in recent years despite a slow down in overall population growth. In the medium term it could well be that the State's population will grow faster over the last decade. This could occur as the effects of the debt created by the State Bank collapse of the early 1990s recede and the low cost and lifestyle advantages of Adelaide as opposed to Sydney and Melbourne lead to a flow of people from the major national concentrations of population. This would be assisted by the increasing role of information technology in rendering major city locations less necessary for economic activities. However, even if a low growth or stable regime is maintained in the longer term the population will continue to change dramatically in its composition and spatial distribution. This has certainly been the case over the last decade of slow growth.

This is the context in which the present study is undertaken. It is not necessarily a bad thing that the State's population is slow growing, stable or even declining. Indeed in Europe some of the most dynamic economies have such a demographic regime. The projected shifts in the age structure however present some dilemmas. There will be increases in productivity but it will be difficult for the State's economic and social sustainability to have a situation where almost one in three inhabitants will be in the dependent age group. If South Australia is to work toward a stable population it should be one which has a better balance between the working age and aged dependent populations. In the short term this means attempting to increase the numbers in the younger age groups and the present study examines one of the elements which has the potential to achieve this.

CHAPTER THREE

INTERSTATE MIGRATION TO AND FROM SOUTH AUSTRALIA

3.1 INTRODUCTION

The objective of this chapter is to address the first objective of the Project namely, the identification in detail of the patterns of interstate migration to and from South Australia for the past six years.

In Australia, the census is the only data source capable of providing comprehensive information on interstate population mobility. The most recent census occurred in August 1996, and its data have enabled detailed analyses of interstate migration patterns, and the factors which drive the process, for the period 1991 to 1996. The next census will occur in August 2001, and its data will provide details on interstate migration for the five years between 1996 and 2001. Quarterly estimates of interstate migration numbers and destinations are prepared by the Australian Bureau of Statistics based on an analysis of Medicare address changes.

In this chapter, the first section will detail the broad characteristics of interstate migration in Australia between 1991-92 and 1998-99, using the quarterly estimates prepared by the ABS. This analysis will give a 'bare bones' picture of interstate migrations, and South Australia's position in the process. It will show which States are most significant, from a South Australian perspective, in the interstate migration process, especially in terms of:

- The origin of migrants to South Australia
- The destination of migrants leaving South Australia
- The levels of migration to and from South Australia
- The extent of any convergence between in- and out-migration.

The second section will examine in detail characteristics of people migrating to and from South Australia between 1991 and 1996, based on data from the 1996 census. This analysis is *in lieu* of a detailed demographic and socio-economic analysis of interstate migration for the subsequent period, which will not be possible until the results of the 2001 Australian census become available. In identifying factors driving the interstate migration process between 1991 and 1996, this section will also identify those factors which are likely to continue to influence the process in the succeeding years to 1999.

3.2 SOUTH AUSTRALIA'S HISTORICAL EXPERIENCE OF INTERSTATE MIGRATION

Before examining recent trends in interstate migration to and from South Australia it is useful to briefly consider the State's historical patterns of interstate migration. Here we will only consider net migration (i.e. the difference between the number of inmigrants and outmigrants). Table 3.1 presents net intestate migration recorded by each State and Territory from each census since 1881.

Table 3.1 Australian Net Interstate Migration of the Australian Born (1881-1971) and the Total Population (1966-96)

Source: Rowland 1979, 20, Bell and Hugo 2000, 72

Intercensal	NSW	Vic	Qld	SA	WA	Tas	NT	ACT				
Period												
	Net Interstate Migration of the Australian-Born Population, 1881-1971											
1881-91	21 359	7 845	7 251	-31 637	1 705	-6 524	-	-				
1891-1901	5 203	-63 978	6 432	-16 660	69 657	-654	-	-				
1901-11	16 285	-38 589	10 154	-11 149	34 248	-10 950	-	-				
1911-21	40 209	-8 770	506	5 578	-20 771	-16 752	-	-				
1921-33	722	3 214	14 271	-5 490	594	-18 242	513	4 418				
1933-47	2 830	18 562	-6 589	-5 234	-10 839	- 7096	4 169	4 197				
1947-54	-34 243	-3 542	22 680	6 967	1 419	1 061	1 608	4 050				
1954-61	-23 580	1 891	15 407	4 144	-7 682	-6 274	4 064	12 030				
1961-66	-15 848	-19 486	10 249	799	8 564	-7 091	3 594	19 219				
1966-71	-18 465	-33 436	17 616	-14 977	22 561	-7 119	10 748	23 072				
	Net interstate migration, States and Territories, Australia, 1966-71 to 1991-96											
1966-71	-20 069	-26 848	15 388	-16 865	22 564	-6 810	8 816	23 824				
1971-76	-74 010	-38 736	65 438	6 247	19 625	-4 044	-875	26 357				
1976-81	-24 470	-55 420	83 558	-14 809	10 597	-4 515	4 458	601				
1981-86	-61 736	-39 431	87 802	-8 679	15 703	-2 107	3 665	4 783				
1986-91	-93 444	-44 751	124 799	-4 282	16 166	-175	-3 650	5 337				
1991-96	-58 796	-78 628	145 459	-18 291	17 281	-6 251	-670	-104				

The data prior to 1971 only refer to the movements of the Australian born population while that since 1971 include the mobility of all residents. It will be noted that over this period South Australia has generally been a State of net interstate migration loss. Indeed for 81 of the 115 years depicted in Table 3.1 net interstate migration losses have been recorded. The major exception to his trend was the two decades between 1947 and 1966 when the manufacturing based boom enjoyed by the State saw a net interstate gain. Only in two other intercensal period (1911-21 and 1971-76) were net gains recorded. It will be noted however that New South Wales has recorded consistent losses since 1947 and Victoria since 1961. On the other hand, Queensland has recorded net gains except during 1933-47 and Western Australia has had consistent net gains since 1961.

Turning to ABS data on net interstate migration estimates which have been made since 1981-2, it will be noted from Table 3.2 that in only two of the 18 years did South Australia record net interstate migration gains. New South Wales recorded net losses in all years and this was also the case in Victoria until 1997-8. Queensland on the other hand has experienced net gains in each year and Western Australia in each year except 1990-93.

Table 3.2 Estimated Net Interstate Migration, States and Territories, Australia, 1981-82 to 1998-99

Source: Bell and Hugo 2000 and ABS Demographic Statistics Quarterlies

Year	State/Territory										
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT			
1981-82	-19584	-14429	35453	-4875	3558	-2022	2069	-170			
1982-83	-17181	-5136	20831	-328	1510	-1214	530	988			
1983-84	-10267	-3340	9959	553	732	695	726	942			
1984-85	-9328	-5799	12920	-2317	1970	777	608	1169			
1985-86	-12462	-13201	16500	-1417	9428	-138	-493	1783			
1986-87	-9524	-13105	19718	-3977	6576	-1508	-120	1940			
1987-88	-13340	-14423	27720	-1240	4274	-1924	-3129	2062			
1988-89	-37974	-12504	47062	-221	4017	203	-1469	-114			
1989-90	-35983	-7829	38102	-252	3012	2790	-1170	1330			
1990-91	-17206	-14853	29709	1545	-1791	816	-1152	2932			
1991-92	-13807	-18427	34099	-658	-1314	-289	-969	1365			
1992-93	-17535	-25388	49162	-5210	-152	-1494	-699	1316			
1993-94	-12180	-29195	44936	-3978	3825	-2107	-875	-426			
1994-95	-13478	-22020	40224	-7069	5101	-2636	384	-486			
1995-96	-14770	-12800	32614	-6192	4066	-2590	328	-656			
1996-97	-11975	-4687	20179	-4628	6189	-3661	1790	-3207			
1997-98	-13542	1206	17967	-3254	4726	-3966	-439	-2698			
1998-99	-14294	3975	17273	-2869	1775	-3619	-938	-1213			

3.3 ANNUAL ESTIMATES OF RECENT INTERSTATE MOBILITY

3.3.1 Introduction

The Australian Bureau of Statistics prepares quarterly estimates of interstate migration based on Medicare transfers. These are the only reliable and regular estimates of interstate mobility which also allow for an estimation of the direction of interstate flows. Figure 3.1 details the levels of net interstate migration for South Australia from 1991-92 to 1998-99. During the period, the departures exceeded arrivals by 33,854 and in none of the years did arrivals exceed departures. The highest levels of net out-migration occurred in 1994-95 (7,070) and 1995-96 (6,191). In the last three years, there has been successive reductions in net out-migration, from 4,628 in 1996-97 to 2,869 in 1998-99. Indeed net interstate migration from South Australia has reduced each year since 1994-95, with the 1998-99 level just 40.6 percent of the level recorded in 1994-95.

Figure 3.2 shows the relationship between arrivals and departures during the nineties. The key observations from the figure are that the three years from 1991-92 experienced successive divergence and convergence, while since 1996-97, the convergence has been accompanied by a decline in both the number of arrivals and departures, with numbers of departures reducing at a greater rate than numbers of arrivals.

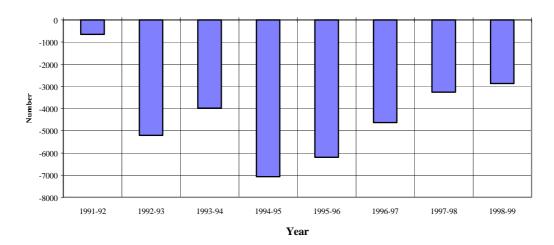
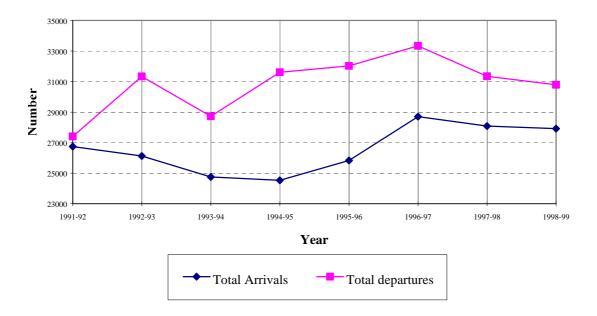


Figure 3.1: Net migration, South Australia, Annual levels, 1990-91 to 1998-99

Figure 3.2: Arrivals and Departures, South Australia, 1991-92 to 1998-99



This suggests that the factors which may have operated to 'push' residents to other States have lessened during the 1996-97 to 1998-99 period, but the influence of 'attractive' factors within the State are not having the same effect as they had in, say, the period 1994-95 to 1996-97.

3.3.2 The geography of interstate migration

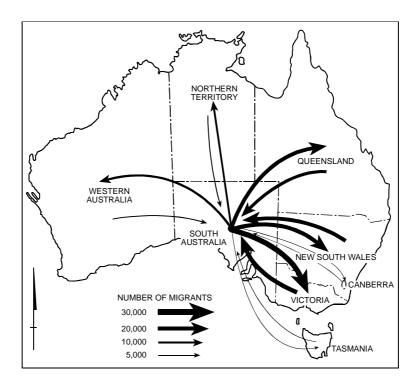
To this point, the Report has focussed only on absolute arrivals and departures numbers and net migration levels for South Australia. However, the ABS quarterly estimates of interstate migration provide estimates of the destination and source of interstate migration streams for

each of the States and Territories. In this section, these data have been used to show the destination of out-migrants from, and the origin of in-migrants to, South Australia during the 1990s.

It is important to note that in Australian interstate migration there is quite a bit of compensating movement. This is apparent in Figure 3.3 which shows the pattern of interstate movement to and from South Australia in 1996-99. The inflows to South Australia over the three year period were 85,426 – some 89.5 percent the size of outflows from the State (95,457 persons). Hence net migration (10,031) was small (5.5 percent) in relation to total movement (180,983 persons).

Figure 3.3: Net Interstate Migration Flows, Australia, 1996-99

Source: ABS 2000a



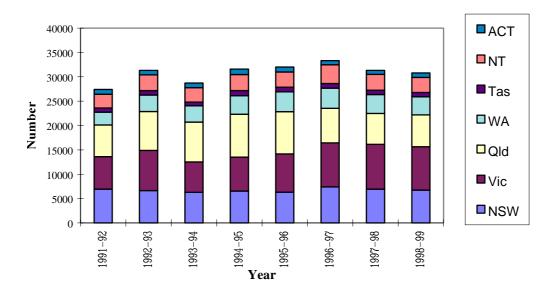
3.3.3 Migrant destinations

Table 3.3 shows in detail the destination of persons leaving South Australia for interstate destinations during the nineties, while Figure 3.4 shows the same details graphically. During the 1990s the predominant destinations for persons leaving South Australia has been the eastern seaboard States. Only in 1991-92 did New South Wales draw the largest number of migrants from South Australia. Between 1993-94 and 1995-96, the largest numbers of migrants moved to Queensland, while in the three years to 1998-99, Victoria has attracted the largest number of migrants leaving South Australia. In the case of New South Wales, the number of migrants from South Australia has been relatively static throughout the period, exceeding 7,000 persons only in 1996-97. On the other hand, numbers of South

To	Year										
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99			
NSW	6945	6652	6268	6542	6310	7382	6919	6727			
Vic	6669	8227	6248	6968	7851	9065	9212	8925			
Qld	6505	7983	8199	8818	8684	7094	6341	6544			
WA	2620	3415	3360	3813	4072	4133	3904	3702			
Tas	868	915	738	1035	967	947	868	880			
NT	2826	3221	2957	3290	3116	3836	3244	3086			
ACT	967	919	953	1136	1024	877	850	921			
Total departures	27400	31332	28723	31602	32024	33334	31338	30785			

Table 3.3: Departures from South Australia, Destinations, 1991-92 to 1998-99

Figure 3.4: Departures from South Australia by State of Destination, 1991-92 to 1998-99



Australian residents moving to Queensland experienced peak numbers in the period 1992-93-94 to 1995-96, and have declined to much lower levels since that time. In contrast, the number of migrants moving to Victoria peaked in 1992-93, declined the following year, and have been generally rising since 1994-95. During the period, out-migration levels to Western Australia and the Northern Territory have been at about half the levels of those to the eastern seaboard States.

3.3.4 Migrant origins

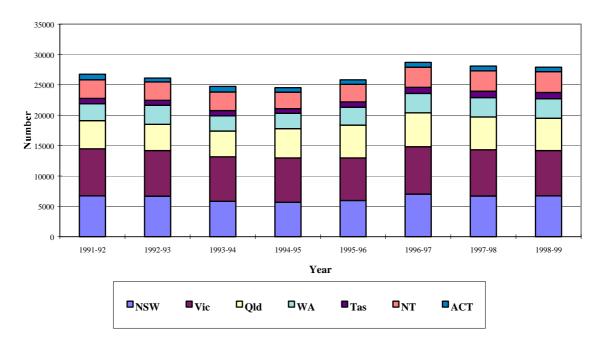
Table 3.4 details the levels of migrant arrivals in South Australia from other States, and Figure 3.5 presents the same data graphically. Total arrivals during the last three years have been at their highest levels for the nineties. Victoria has been the dominant source for migrants to South Australia, ahead of New South Wales and Queensland. As Figure 3.5

shows, numbers from Victoria have been reasonably uniform in each year since 1991-92, ranging from a low of 7,015 migrants in 1995-96 to a high of 7,811 the following year. Numbers from New South Wales peaked at 7,010 in 1996-97 compared with its lowest level the previous year. Migrant numbers from Queensland have varied from the low 4,000s to the mid 5,000s. Of the other States, reasonably high numbers of migrants have originated in the Northern Territory and Western Australia. The migrant stream from the Northern Territory has been reasonably consistent during the period, while the stream from Western Australia has tended to fluctuate, with the highest numbers being reported in the three years to 1998-99.

Table 3.4: Arrivals in South Australia by State, 1991-92 to 1998-99

From	Year									
-	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99		
NSW	6733	6655	5816	5660	5947	7010	6695	6728		
Vic	7740	7530	7331	7297	7015	7811	7615	7462		
Qld	4622	4318	4243	4840	5414	5575	5412	5315		
WA	2811	3124	2508	2526	2957	3180	3175	3221		
Tas	874	838	878	752	848	1001	1069	1024		
NT	3050	3020	3061	2730	2898	3339	3349	3433		
ACT	916	637	908	727	754	790	769	733		
Total Arrivals	26746	26122	24745	24532	25833	28706	28084	27916		

Figure 3.5: Arrivals in South Australia by State of Origin



3.3.5 Net migration

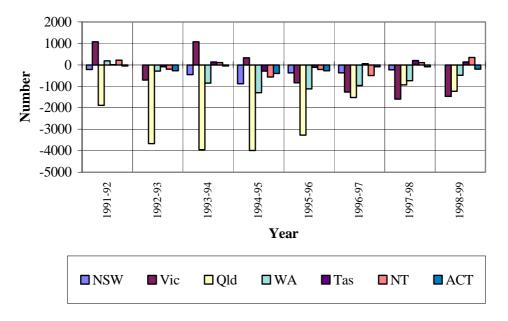
Net migration is the difference between arrivals and departures. It determines whether there is a net loss or gain of population for the State. Levels of net migration, be it positive or negative net migration, have significant implications for policy. Since 1991-92, the State has experience negative net migration each year. As indicated earlier, highest levels of net out-migration occurred in 1994-95 and 1995-96, and have declined each year in the three years since. Table 3.5 and Figure 3.6 detail States contributing most significantly to the levels of out-migration experienced by South Australia during the nineties.

Table 3.5: Net Migration, South Australia, 1991-92 to 1998-99

State Year

State		Year										
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99				
NSW	-212	3	-452	-882	-363	-372	-224	1				
Vic	1071	-697	1083	329	-836	-1254	-1597	-1463				
Qld	-1883	-3665	-3956	-3978	-3270	-1519	-929	-1229				
WA	191	-291	-852	-1287	-1115	-953	-729	-481				
Tas	6	-77	140	-283	-119	54	201	144				
NT	224	-201	104	-560	-218	-497	105	347				
ACT	-51	-282	-45	-409	-270	-87	-81	-188				
Net	-654	-5210	-3978	-7070	-6191	-4628	-3254	-2869				

Figure 3.6: Net Migration, South Australia



By far the most significant destination for migrants from South Australia has been Queensland. In the eight years from 1991-92, the migrant stream from South Australia to Queensland contained 20,429 more migrants than the counter stream. In comparison, other net losses were considerably smaller – 5,517 for Western Australia, 3,364 for Victoria and 2,501 for New South Wales. As Figure 3.6 shows, the net migration stream to Queensland increased sharply in 1992-93, and remained high for the next three years, with a peak of

3,978 in 1994-95. In the three years 1995-96, the magnitude of net migration to Queensland has declined significantly.

Net migration levels to New South Wales have fluctuated from year to year during the period under review, but have never exceeded 1,000. As well, very low positive net migration occurred between South Australia and New South Wales for two years. After peaking in 1994-95, net out-migration to New South Wales has reduced to the point where there was net in-migration recorded in 1998-99.

In contrast, net migration levels with Victoria were generally positive until 1994-95, but since then net out-migration from South Australia to Victoria has occurred, reaching a peak of 1,597 in 1997-98. Of the eastern seaboard States, therefore, Victoria is presently providing more opportunities for migrants from South Australia than either of Queensland and New South Wales, which is undoubtedly due to the economic resurgence experienced in Victoria from the early 1990s.

If we focus especially on the period since 1996 it is interesting to observe some quite distinct differences in interstate migration to those recorded earlier in the 1990s. While the State has continued to suffer net migration losses in the late 1990s these have declined continually since 1994-96 when they were at record high levels. In fact, while there has been a net loss by interstate migration of 10,881 in the three years following the 1996 census the level in 1998-99 was the lowest for a decade. It is interesting to note (Table 3.6) also the post-censal changes in the other States which suggest there may have been some moderate realignments of interstate migration in the late 1990s...

- Victoria has reversed a pattern of high levels of net loss by interstate migration in the early 1990s to net gains after 1997.
- Queensland's net gains by interstate migration, while by far still the largest of any State/Territory, are at the lowest levels for over a decade, substantially less than half the levels of the early 1990s.
- Western Australia's net gains have also declined in the late 1990s.

Table 3.6: Net Interstate Migration by State, 1993-99

	New South	Victoria	Queensland		Western	Tasmania	Northern	Australian
	Wales			Australia	Australia		Territory	Capital Territory
Period	No.	No.	No.	No.	No.	No.	No.	No.
			NET INTER	RSTATE MI	GRATION			
1993-94	-12,180	-29,195	44,936	-3,978	3,825	-2,107	-875	-426
1994-95	-13,478	-22,020	40,224	-7,069	5,101	-2,656	384	-486
1995-96	-14,770	-12,800	32,614	-6,192	4,066	-2,590	328	-656
1996-97	-11,975	-4,687	20,179	-4,628	6,189	-3,661	1,790	-3,207
1997-98	-13,542	1,206	17,967	-3,254	4,726	-3,966	-439	-2,698
1998-99	-14,294	3,975	17,233	-2,869	1,775	-3,669	-938	-1,213

If we focus on the South Australian pattern of interstate migration, Figure 3.3 shows the patterns of movement to and from each other State/Territory and South Australia over the 1996-99 period. This indicates that the State still sent more interstate migrants to Victoria, New South Wales, ACT, Queensland and Western Australia than it received. However, it is

interesting that Victoria has assumed the position of the main State of destination from Queensland which dominated in the early 1990s. The net interstate migration patterns are shown in Table 3.7 for the 1996-99 and 1998-99 periods and this would seem to bear out the decline in net migration losses.

Table 3.7: Interstate Migration, 1996-99 and 1998-99

State	1996-99	1998-99
New South Wales	-595	+1
Victoria	-4,314	-1,463
Queensland	-3,677	-1,229
Western Australia	-2,163	-481
Tasmania	+399	+244
Northern Territory	+45	+347
Australian Capital Territory	-356	-188
Total	-10,661	-2,869

3.3.6 Summary

The preceding sections have provided insights into the magnitude, direction and geography of migration from South Australia. However, these ABS estimates are not accompanied by any demographic and socio-economic data to provide details of the social and economic characteristics of movers. In a subsequent section, however, results of a survey of former South Australians presently located interstate will be presented and assessed and these will provide insights into the characteristics of movers, what motivates them to move, and remain, away from South Australia, and what kind of environment would need to be established in South Australia to cause out-migrants to consider a return to the State.

3.4 DEMOGRAPHIC AND SOCIO-ECONOMIC ASPECTS OF INTERSTATE MIGRATION, 1991-969

3.4.1 Introduction

Internal migration is the major demographic process generating changes in the distribution of Australia's population and a thorough understanding of these movements is essential to informed planning and decision-making. This section provides an analysis of interstate migration during the 1991-96¹⁰ intercensal period. Its objectives are:

• to analyse interstate movements to and from South Australia between 1991 to 1996 documenting the trends, scale, composition and patterns of these movements;

The material for this section draws heavily on the work of Dr Martin Bell, Research Fellow, Department of Geographical and Environmental Studies and Key Centre for Social Applications of GIS, The University of Adelaide. An exhaustive analysis can be found in Bell, Martin (2000), Interstate Migration: The South Australian Experience (Second Edition), Prepared under the Research Program of the Geodemographic Research Group, Department of Transport, Urban Planning and the Arts and University of Adelaide.

For a brief statement describing interstate migration to and from South Australia between 1966 and 1991, see Section 2.3 in Bell (2000) refer footnote before this one. A comprehensive statement on interstate migration to and from South Australia between 1986 and 1991 can be found in Bell, Martin (1997) *Interstate Migration The South Australian Experience (First Edition), Prepared under the Research Program of the Geodemographic Research Group, Department of Transport, Urban Planning and the Arts and University of Adelaide.*

• to provide a basis for understanding contemporary patterns of migration from a South Australian perspective.

The analyses are derived from a number of customised matrices from the 1996 Census acquired from the Australian Bureau of Statistics. Five year migration data are generally preferable to data for a single year because they provide a more stable picture of the incidence and patterns of migration, unaffected by the impacts of specific events.

As has been noted earlier, Census data provide comprehensive details of the origins and destinations of internal migrants, and their characteristics. However, data from the 1996 Census is now inevitably dated. It should be noted that the estimates used in the last section are derived from Medicare records and are not directly comparable with the information collected at the Census. Nevertheless, the Census can indicate the characteristics of migrants which the estimates do not.

The Census provides details of the origin and destination of internal migrants together with selected characteristics at a variety of spatial scales. In this chapter most analyses are made at the State level, with analysis focussing on the patterns and composition of movements between South Australia and other parts of the country, and the origin and destination of interstate migrants entering and leaving South Australia. In addition, a range of migrant characteristics including their age and sex composition, labour force status, birthplace, household type and household income are examined. This type of analysis is particularly relevant to a report such as this as it emphasises the selectivity of internal migration in terms of age, qualifications, occupational skills and socio-economic status, and the impact selectivity can have in terms of a brain drain and de-skilling of the resident workforce.

3.4.2 Net migration, 1991-96

In the period between 1947 and 1961, inmigration to South Australia exceeded outmigration levels. In the period 1961-66, there was a net loss of 300 persons from South Australia, but in the second half of the sixties the rate of losses intensified, and has continued since, with the exception of the 1971-76 period, as shown in Table 3.8.

Although there was a steady reduction in net losses to interstate during the 1980s, the 1990s saw a radical reversal of the trend: between 1991 and 1996 South Australia registered a net loss of more than 17,800 people to other parts of the continent, a fourfold increase over the previous intercensal period. This represented the highest average annual outflow ever recorded from South Australia, exceeding the previous peak losses of the late 1960s (16,865) and late 1970s (14,840). The losses between 1991-96 even out-paced the rapid out-migration of the 1880s depression. These losses are almost certainly linked to the State Bank collapse and the stringent economic policies imposed by subsequent State Governments in an effort to rein in State debt. Curbs on capital works spending, reductions in public sector employment and a general fall in business and consumer confidence combined to reduce job opportunities and economic growth in an environment already being buffeted by successive waves of economic restructuring and micro-economic reform.

Table 3.8: Net Interstate Migration by State and Territory, South Australia, 1966-71 to 1991-96

Source: ABS Censuses (unpublished data)

State or Territory	1966-71	1971-76	1976-81	1981-86	1986-91	1991-96
NSW	-971	7664	-1570	1447	3229	-1673
Vic	-3202	3745	-1364	-909	-54	159
Qld	-1873	-2486	-6670	-5509	-5928	-11581
WA	-5878	-2015	-2533	-1818	-1057	-2763
Tas	-9	452	-100	-6	-51	-230
NT	-3065	127	-2211	-1456	-100	-734
ACT	-1867	-1238	-392	-428	-321	-1008
Total	-16865	6249	-14840	-8679	-4282	-17830
Percent of total						
NSW	-5.8	122.6	-10.6	16.7	75.4	-9.4
Vic	-19.0	59.9	-9.2	-10.5	-1.3	0.9
Qld	-11.1	-39.8	-44.9	-63.5	-138.4	-65.0
WA	-34.9	-32.2	-17.1	-20.9	-24.7	-15.5
Tas	-0.1	7.2	-0.7	-0.1	-1.2	-1.3
NT	-18.2	2.0	-14.9	-16.8	-2.3	-4.1
ACT	-11.1	-19.8	-2.6	-4.9	-7.5	-5.7
Total	-100.0	100.0	-100.0	-100.0	-100.0	-100.0

The increase in net migration losses between 1991-96 was due both to an increase in the propensity to leave the State and to a fall in South Australia's ability to attract people from other parts of Australia. The rate of inwards movement into South Australia fell sharply from 42.6 per thousand to 36.1 per thousand, reflecting an overall decline in the number of interstate arrivals from 58,945 to 52,205. At the same time the rate of outwards movement rose from 45.7 to 48.4 per thousand, reflecting an increase in departures from 63,227 to 70,035. Thus, the fall in arrivals between 1986-91 and 1991-96 (6,740) almost exactly matched the rise in departures (6,808) so that the two sources accounted in about equal parts for the rapidly escalating net migration loss.

The driving factor for these events undoubtedly was the general deterioration in South Australia's economic position, and this caused net losses to all other States and both Territories, with the notable exception of Victoria (Table 3.8). The most significant shifts related to Queensland and New South Wales. Net outflows to Queensland, which had remained at a fairly stable level over the previous fifteen years, doubled to reach more than 11,000 over the five year period. At the same time, net inmigration from New South Wales, which had prevailed throughout the 1980s, was reversed. While the overall loss to New South Wales (1,673 people) was much lower than that to Queensland, this change from a gain of 3,229 in the previous intercensal period, a shift of almost 5,000 people, accounted for more than a third (36 percent) of the overall rise in South Australia's net interstate loss between the 1986-91 and 1991-96 intervals. This was only marginally less significant than the rise in losses to Queensland (42 percent of the aggregate change). By comparison, the

increase in outflows to other States and the Territories was comparatively small: losses to Tasmania rose from 51 to 230, from 100 to 734 to the Northern Territory, from 321 to 1008 to the ACT and from 1,057 to 2,763 to Western Australia, together accounting for just 24 percent of the total shift between periods.

Against this consistent pattern of increasing losses to other States and Territories, the net gain, albeit of just 159 persons, from Victoria clearly stands out. This represented an upward trend compared with 1986-91, making Victoria the only State from which South Australia gained between 1991 and 1996. Victoria, like South Australia, imposed stringent economic policies to meet public sector debt but downsizing began earlier and was even more savage than in South Australia, and the net interstate flow from this source almost certainly reflects out-migration by displaced Victorians.

3.4.3 Interstate movement, 1991-96

While assessments of interstate mobility centre around net movements, the net balances of inmigration and outmigration result from much larger population streams and counterstreams. The loss of 17,830 persons between 1991-96 was the result of more than 52,000 inmigrants during the five year period, and more than 70,000 outmigrants (Table 3.9). Relative to actual inmigration and outmigration numbers across the State's borders, the net loss was not large - the equivalent of just 14.6 persons for every 100 cross border moves (the migration effectiveness ratio or MER). However, in the 1986-91 period the MER was 3.5 percent. Table 3.9 also demonstrates that the higher net loss in the 1991-96 interval reflected both an increase in departures from South Australia, and a decline in arrivals compared with the previous intercensal period.

South Australia's largest inflows between 1991 and 1996 were from the two most populous States. Together, New South Wales and Victoria contributed 58 percent of arrivals with smaller gains from Queensland (14 percent), the Northern Territory (11 percent) and Western Australia (10 percent). The eastern seaboard States were also the principal destination for people leaving South Australia, but Queensland was the most preferred destination for this group, accounting for 27 percent of outflows, followed by Victoria (23 percent) and New South Wales (22 percent). Western Australia (11 percent) and the Northern Territory (9 percent) were secondary destinations ahead of Tasmania and the ACT, each of which accounted for just 3-4 percent of departures and a similar share of arrivals.

This distribution of migration flows is remarkably similar to that which obtained in the previous intercensal period. The main differences were

- the increased significance of Victoria as a source of migrants
- the increased significance of Queensland as a destination for migrants.

Inflows to South Australia dropped from all States and Territories except Victoria, with the result that:

- Victoria accounted for a marginally higher proportion of the inflow in 1991-96 (31 percent) than in 1986-91 (29 percent)
- most (72 percent) of the overall rise in outflows from South Australia was to Queensland

• Queensland increased its share of the aggregate outflow from 22 percent to 27 percent between the two periods.

Table 3.9: Interstate Migration Flows, Rates and Effectiveness, by Source and Destination, South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 Censuses (unpublished data)

State or Territory		Numbers		M	igration rate ¹		MER ²
Territory	Arrivals	Departures	Net	Arrivals	Departures	Net	
			1986	6-91			
NSW	17322	14093	3229	5.0	4.1	0.9	10.3
Vic	16959	17013	-54	6.1	6.1	0.0	-0.2
Qld	8116	14044	-5928	4.1	7.0	-3.0	-26.8
WA	5814	6871	-1057	4.1	4.8	-0.7	-8.3
Tas	2096	2147	-51	2.3	2.3	-0.1	-1.2
NT	6510	6610	-100	8.5	8.6	-0.1	-0.8
ACT	2128	2449	-321	2.6	3.0	-0.4	-7.0
Total	58945	63227	-4282	7.4	7.9	-0.5	-3.5
			199	1-96			
NSW	13962	15635	-1673	3.8	4.3	-0.5	-5.7
Vic	16408	16249	159	5.7	5.6	0.1	0.5
Qld	7396	18977	-11581	3.4	8.7	-5.3	-43.9
WA	5111	7874	-2763	3.4	5.2	-1.8	-21.3
Tas	1925	2155	-230	2.1	2.3	-0.2	-5.6
NT	5802	6536	-734	7.5	8.4	-0.9	-5.9
ACT	1601	2609	-1008	1.9	3.1	-1.2	-23.9
Total	52205	70035	-17830	6.1	8.1	-2.1	-14.6

Note 1: Migration divided by the mean of the populations in the States of origin and destination and multiplied by 1000

Note 2: Net migration multiplied by 100 and divided by the sum of arrivals and departures

The net effect of these shifts was

- a marked increase in losses to all States and Territories except Victoria,
- and a reversal of the previous gains from New South Wales.
- That Queensland became the principal beneficiary of South Australia's migration exchanges.

During the period 1991-96 Queensland accounted for two-thirds of South Australia's net migration loss, with Western Australia (16 percent), New South Wales (9 percent) and the Territories (10 percent in combination) sharing the remainder. Exchanges with Tasmania and Victoria were closely balanced.

Despite Queensland's dominant role, the data in Table 3.9 reveals that South Australia's interstate migration experience does not consist simply of outflows to the sunbelt: only one in four people leaving South Australia moved to Queensland. Moreover, while nearly 19,000 people relocated in Queensland between 1991 and 1996, there was a flow of more than 7,000 in the reverse direction. This asymmetry, nevertheless, generated the highest 'migration effectiveness' of all South Australia's population exchanges with a loss of 44 people for every hundred moving to and from Queensland (Table 3.9).

The counter stream identified above may represent retired persons relocating back to South Australia for a variety of reasons. A strategy to entice more of those retiring to Queensland to return to South Australia could revolve around identifying locations in South Australia which have climatic conditions similar, although not identical, to those in Queensland. Whyalla and other coastal locations within the State, could have significant potential.

3.4.4 Regional destinations

Most South Australian outmigrants are attracted to the capital cities of other States. Similarly, most inmigrants to South Australia are from State capitals. Sydney, Melbourne, Brisbane and Perth together contributed 41 percent of arrivals and accounted for 47 percent of departures from South Australia between 1991 and 1996. If Hobart, Darwin and Canberra are considered, outmigration and inmigration levels rise to 50 percent and 56 percent respectively. However, these proportions are substantially below the share of total population resident in Australia's capitals (62 percent in 1991, excluding SA), indicating that the non-metropolitan parts of Australia accounted for more than their pro-rata share of interstate exchanges with South Australia. This is partly due to

- above average rates of exchange with major destination regions such as Moreton in Queensland
- the role of local cross border flows to adjacent regions in Victoria and New South Wales.

Table 3.10 shows that the broad pattern of net interstate migration discussed earlier conceals substantial variations in patterns of exchange at the regional level. Focusing on New South Wales, for example, South Australia gained substantially from the Far Western Statistical Division (which includes Broken Hill), but lost to Sydney, to the coastal sunbelt regions of Richmond-Tweed and the Midnorth Coast. Similarly, the close net balance from exchanges with Victoria conceals a substantial loss to Melbourne, offset by gains from several non-metropolitan regions, especially the Western Districts and the Mallee. Queensland presents an equally diverse picture with the bulk of South Australia's net losses being to the popular coastal destinations of the southeast and the Far North SD (based around Cairns). In Western Australia and the Territories, most of South Australia's loss was to the capital city.

In net terms, the broad picture that emerges from Table 3.10 can be summarised as follows: The largest net losses were to:

- The major cities in all other States and Territories except Tasmania
- Coastal sunbelt regions of Queensland and New South Wales;

Table 3.10: Regional Origins and Destinations: Arrivals, Departures and Net Migration, South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 Censuses (unpublished data)

Region		1986-91				1991-96	5	
	In ¹	Out ²	Net	In ¹	Out ²	Net	Percent of net	MER ³
New South Wales								
Sydney	10089	7901	2188	6999	9490	-2491	14.0	-15.1
Hunter	1142	910	232	919	931	-12	0.1	-0.6
Illawarra	732	578	154	609	669	-60	0.3	-4.7
Richmond-Tweed	366	723	-357	383	756	-373	2.1	-32.7
Mid-north	480	589	-109	423	594	-171	1.0	-16.8
Northern	372	377	-5	353	304	49	-0.3	7.5
North Western	243	306	-63	317	295	22	-0.1	3.6
Central West	453	306	147	440	384	56	-0.3	6.8
South Eastern	403	490	-87	417	431	-14	0.1	-1.7
Murrumbidgee	790	621	169	792	601	191	-1.1	13.7
Murray	607	554	53	694	580	114	-0.6	8.9
Far Western	1645	738	907	1616	600	1016	-5.7	45.8
Victoria								
Melbourne	9781	10489	-708	8546	10317	-1771	9.9	-9.4
Barwon	694	639	55	765	686	79	-0.4	5.4
Western	1132	1119	13	1358	815	543	-3.0	25.0
Central Highlands	545	538	7	643	513	130	-0.7	11.2
Wimmera	723	652	71	798	651	147	-0.8	10.1
Continued								
Mallee	1253	1025	228	1602	1079	523	-2.9	19.5
Loddon-Campaspe	736	657	79	591	574	17	-0.1	1.5
Goulbourn	760	647	113	824	585	239	-1.3	17.0
Ovens-Murray	449	548	-99	471	470	1	0.0	0.1
East Gippsland	362	384	-22	344	262	82	-0.5	13.5
Gippsland	524	315	209	466	297	169	-0.9	22.1
Queensland								
Brisbane	3130	5189	-2059	2747	7685	-4938	27.7	-47.3
Moreton	1202	3346	-2144	1256	4631	-3375	18.9	-57.3
Wide Bay	406	1039	-633	399	1086	-687	3.9	-46.3
Darling Downs	429	521	-92	364	567	-203	1.1	-21.8
South West	254	99	155	100	58	42	-0.2	26.6
Fitzroy	478	677	-199	454	712	-258	1.4	-22.1

Table 3.10 continued over

Table 3.10

Central West	88	67	21	51	30	21	-0.1	25.9
Mackay	332	551	-219	218	680	-462	2.6	-51.4
Northern	1001	1122	-121	861	1314	-453	2.5	-20.8
Far North	601	1249	-648	783	2060	-1277	7.2	-44.9
North West	195	184	11	163	154	9	-0.1	2.8
Western Australia								
Perth	3610	4348	-738	3046	5126	-2080	11.7	-25.5
South West	325	417	-92	273	554	-281	1.6	-34.0
Lwr Great Southern	105	174	-69	147	158	-11	0.1	-3.6
Upr Great Southern	51	84	-33	42	69	-27	0.2	-24.3
Midlands	208	153	55	119	171	-52	0.3	-17.9
South Eastern	607	880	-273	662	938	-276	1.5	-17.3
Central	234	290	-56	244	205	39	-0.2	8.7
Pilbara	523	383	140	447	493	-46	0.3	-4.9
Kimberley	151	142	9	131	160	-29	0.2	-10.0
Tasmania								
Greater Hobart	846	808	38	766	852	-86	0.5	-5.3
Southern	113	165	-52	114	171	-57	0.3	-20.0
Northern	550	683	-133	597	653	-56	0.3	-4.5
Mersey-Lyell	587	491	96	448	479	-31	0.2	-3.3
Northern Territory								
Darwin	3202	2893	309	2359	3120	-761	4.3	-13.9
NT Balance	3308	3717	-409	3443	3416	27	-0.2	0.4
ACT								
Canberra	2122	2437	-315	1601	2606	-1005	5.6	-23.9
ACT Balance	6	12	-6	0	3	-3	0.0	-100.0
Total	58945	63227	-4282	52205	70035	-17830	100.0	-14.6

Note 1: In=Arrivals

Note 2: Out=Departures

Note 3: Net migration multiplied by 100 and divided by the sum of arrivals and departures

3.4.5 Interstate moves to and from South Australian regions

Table 3.11 demonstrates that all regions of the State, including the Adelaide Statistical Division (ASD), recorded net outflows. Of the non-metropolitan regions, only Northern Statistical Division registered an outflow in excess of 1,000 people. The lowest level occurred in Eyre, reflecting the role of economic development, in this case at Western Mining Corporation's Roxby Downs operation, in reducing the extent of net outmigration. Table 3.11 also demonstrates that it was Adelaide that accounted for the sharp rise in overall interstate losses from South Australia between 1986-91 and 1991-96. The fall in interstate arrivals and matching rise in interstate departures was confined almost entirely to the ASD.

The profile of net interstate migration for South Australia between 1991 and 1996 is different from the 1986-91 period when the more rural parts of the State recorded the bulk

of the outflows. Non-metropolitan regions of the State continued to lose migrants to other parts of Australia between 1991 and 1996, but the scale of this loss was far exceeded by the net movement away from the Adelaide Statistical Division.

Table 3.11: Arrivals, Departures and Net Interstate Migration, Statistical Divisions of South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 Censuses (unpublished data)

Statistical Division		1986-91			1991-96	_
	Arrivals	Departures	Net	Arrivals	Departures	Net
Adelaide	44260	44904	-644	37775	51765	-13990
Outer Adelaide	3765	3651	114	3744	3982	-238
Yorke & Lower Nth	1170	1601	-431	1207	1457	-250
Murray Lands	2563	2826	-263	2402	2929	-527
South East	2860	3843	-983	2930	3565	-635
Eyre	937	1735	-798	1189	1385	-196
Northern	3390	4667	-1277	2958	4952	-1994
Total	58945	63227	-4282	52205	70035	-17830

Table 3.12: Net Interstate Migration by Source and Destination, Statistical Division of South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 Censuses (unpublished data)

State	Adelaide	Outer	Yorke &	Murray	South East	Eyre	Northern
		Adelaide	Lower Nth	Lands			
			1986	-91			
NSW	3418	363	-3	-26	-206	-122	-195
Vic	198	172	-53	23	-107	-127	-160
Qld	-4285	-376	-140	-198	-314	-208	-407
WA	-376	-36	-120	-13	-147	-167	-198
Tas	189	-14	-45	3	-7	-81	-96
NT	450	4	-78	-11	-182	-93	-190
ACT	-238	1	8	-41	-20	0	-31
Total	-644	114	-431	-263	-983	-798	-1277
			1991	-96			
NSW	-1462	125	44	-1	-120	-48	-211
Vic	-248	307	26	82	192	-3	-197
Qld	-9106	-621	-224	-436	-483	-130	-581
WA	-1670	-76	-102	-91	-157	-53	-614
Tas	-122	25	-30	-54	9	-10	-48
NT	-451	-7	33	-18	-66	48	-273
ACT	-931	9	3	-9	-10	0	-70
Total	-13990	-238	-250	-527	-635	-196	-1994

Table 3.12 displays the spatial pattern of losses within the State for 1986-91 and 1991-96. It particularly shows how the 1991-96 pattern has changed radically from that of 1986-91. In 1991-96, the non-metropolitan parts of the State continued to lose population to the eastern States in roughly the same proportions as before with Queensland and Western Australia absorbing slightly higher proportions of the loss, while New South Wales and the Northern Territory accounted for smaller shares. As well, there was a small gain from, rather than a loss to, Victoria. It was the State capital, however, that felt the brunt of the change. Adelaide's losses to Queensland, Western Australia and the ACT rose sharply while the offsetting gains from New South Wales and the Northern Territory came to an abrupt halt. The impetus towards metropolitanisation that characterised the late 1980s, triggered by rural losses and urban gains in exchanges with other States, was therefore reversed in the first half of the 1990s by a massive exodus from the State capital, primarily to southeast Queensland, Perth and Canberra, and a reversal in Adelaide's net gain from Sydney.

3.4.6 Summary

This section has sought to identify the magnitude of migration flows to and from South Australia in the period between 1991 and 1996. There has been some attempt to make pertinent comparisons with situations which have occurred at various times in the post-war period.

The main points to emerge from this discussion have been:

- Migration discussion usually focuses on the net balance of migration flows but it is important to remember that the net gain or loss in any State or region is no more than the residual of much larger flows and counterflows.
- In the case of South Australia, the net loss of 17,800 people to interstate destinations between 1991 and 1996 represented the result of more than 70,000 departures, offset by almost 52,000 arrivals.
- The increase in the overall net loss from just 4,282 in the previous intercensal period was contributed in about equal proportions by a rise in departures (from 63,000) and a decline in arrivals (from 59,000).
- The State's largest population exchanges were with New South Wales, Victoria and Oueensland.
- Exchanges with most States and Territories were closely balanced: arrivals more or less matched departures.
- In the case of Queensland, however, the relationship was strongly asymmetric: some 19,000 people left South Australia for Queensland between 1991 and 1996 but only 7,400 moved in the reverse direction. This net outflow of 11,600 to Queensland accounted for two thirds of South Australia's aggregate interstate loss over the five year interval. The remainder was due principally to exchanges with Western Australia (-2,760), New South Wales (-1,670) and the ACT (-1,000).

Aggregate figures mask substantial variation in South Australia's pattern of migration exchanges with individual regions in other States and Territories.

 Net losses to Queensland were concentrated primarily in the State's south east (Brisbane, the Gold and Sunshine Coasts and Wide Bay-Burnett) and on the north Queensland coast (Cairns). • South Australia also lost heavily to all other State and Territory capitals (except Hobart) but in the case of Victoria and New South Wales received compensating gains from their non-metropolitan hinterlands.

The main changes from the previous intercensal period were

- markedly increased losses to Brisbane, Moreton and north coastal Queensland, as well as to Melbourne, Perth, and Canberra
- a reversal of the previous gains from Sydney and Darwin.
- These rising outflows were partly offset by higher gains from non-metropolitan Victoria and the cessation of earlier losses to the Balance of the NT.

This shift in the magnitude of the outflow and in the pattern of exchanges with other States was also reflected in a marked change in the source of the loss from within South Australia. All statistical divisions except Outer Adelaide lost to interstate but Adelaide itself accounted for 80 percent of the aggregate outflow. This compares with only 15 percent between 1986 and 1991. Thus it was a shift in the level and pattern of movements to and from Adelaide that accounted for the watershed in South Australia's interstate migration fortunes between 1986-91 and 1991-96. Adelaide's previous gains from Sydney and Darwin evaporated and its losses to other cities and to the Queensland sunbelt increased. The impact on other parts of the State was negligible.

3.5 THE COMPOSITION OF INTERSTATE MIGRATION 1991-96

3.5.1 Introduction

In the previous section the emphasis was placed on detailing the size of migration movements to and from South Australia between 1991 and 1996. However, the propensity to move varies widely among people, and in this section the emphasis is on defining various attributes of the migration streams. In particular, this section will focus on three principal dimensions of people who moved between 1991 and 1996 - their demographic and birthplace attributes and their labour force composition.

3.5.2 Age and sex

Table 3.13 and Figure 3.7 display the age-sex distribution of South Australia's interstate arrivals, departures and net migration between 1991 and 1996. The data show a number of significant observations:

- South Australia lost population in all age groups except at age 60-64.
- the most substantial losses occurred among young adults in their twenties and thirties
- net outflows of 20-29 year olds accounted for 37 percent of the aggregate net loss
- people aged 30-39 made up a further 25 percent
- substantial outflows also occurred among people in their forties as well as of teenagers and young children
- in contrast, outflows at ages over 55 were very small.

Figure 3.7: Interstate Arrivals, Departures and Net Migration by Age and Sex, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

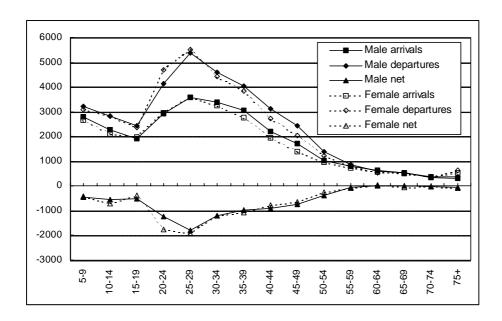


Table 3.13: Interstate Arrivals, Departures and Net Migration by Age and Sex, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Age		Males			Females			Persons	
	Arrivals	Depart-	Net	Arrivals	Depart-	Net	Arrivals	Depart-	Net
		ures			ures			ures	
5-9	2795	3227	-432	2652	3078	-426	5447	6305	-858
10-14	2260	2810	-550	2119	2825	-706	4379	5635	-1256
15-19	1917	2425	-508	1982	2353	-371	3899	4778	-879
20-24	2916	4140	-1224	2941	4703	-1762	5857	8843	-2986
25-29	3594	5394	-1800	3591	5510	-1919	7185	10904	-3719
30-34	3390	4587	-1197	3245	4438	-1193	6635	9025	-2390
35-39	3049	4027	-978	2764	3849	-1085	5813	7876	-2063
40-44	2217	3119	-902	1946	2732	-786	4163	5851	-1688
45-49	1709	2439	-730	1400	2048	-648	3109	4487	-1378
50-54	1033	1399	-366	965	1226	-261	1998	2625	-627
55-59	803	852	-49	738	810	-72	1541	1662	-121
60-64	622	601	21	570	535	35	1192	1136	56
65-69	531	527	4	493	533	-40	1024	1060	-36
70-74	332	369	-37	360	383	-23	692	752	-60
75+	304	369	-65	548	623	-75	852	992	-140
Total	27472	36285	-8813	26314	35646	-9332	53786	71931	-18145

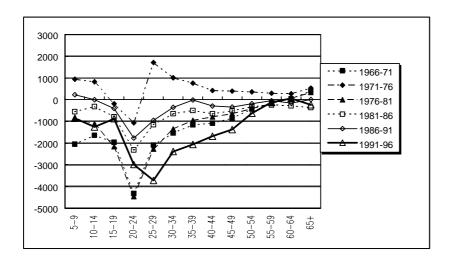
The nature of this profile is significant because it demonstrates that despite the strong bias towards Queensland, retirement migration represented a negligible component of South Australia's interstate migration loss. The following analyses will throw more light on the characteristics of South Australian migrating to Queensland during this period.

There is evidence in Table 3.13 and Figure 3.7 of minor sex differentials in the in- and out-migration flows.

- men consistently outnumbered women among interstate arrivals aged 30 to 69 but these sex differences were largely nullified by similar variations among departures.
- this predominance of males in both the inwards and outwards flows is a persistent feature of long-distance migration and is readily explained by the higher representation of men in the more mobile, professional and managerial occupational groups.
- more striking (see Figure 3.7), is the excess of females among departing young adults aged 20-24, and the absence of a compensating sex variation in the inwards counterflow. This appears to reflect the greater opportunities for young adults interstate, and the fact that young women generally leave the parental home earlier than young men.
- the net effect, shown in Table 3.13, is a substantially higher rate of loss of women in their early twenties than of men.

Figure 3.8: Net Interstate Migration by Age, South Australia, 1966-71 to 1991-96

Source: ABS 1984 and ABS 1991 and 1996 Censuses (unpublished data)



Although the magnitude of South Australia's net interstate migration has changed radically since the 1966-71 period, Figure 3.8 reveals that the *shape* of the age profile remained remarkably consistent until the 1991-96 period. During the 25 years to 1991, the key feature of interstate migration had been the sustained loss of young adults in their early twenties. Even during 1971-76, when the State recorded a net migration gain, there was a net outflow of 20-24 year olds. These characteristics suggest that the shifts in magnitude of arrivals, departures and net migration flows prior to the 1990s could not be attributed to changes in

the behaviour pattern of specific age groups. Rises and falls in the migration balance were generally mirrored across the age spectrum, the only exception being between 1971 and 1976 when the 25-29 age group made an unprecedented contribution to the net gain.

The significant difference with the 1991-96 profile is that although its shape is similar to those of other periods, it is displaced along the age axis because peak losses occurred in the 25-29 age group, rather than among 20-24 year olds. Further, there was a substantial increase in net outflows of people aged 30-49.

Table 3.14: Interstate Arrivals and Departures by Age, South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 Censuses (unpublished data)

Age	1986-91	1991-96	Difference		
			Number	Percent	
		Arrivals			
5-9	6232	5447	-785	-12.6	
10-14	4872	4379	-493	-10.1	
15-19	4535	3899	-636	-14.0	
20-24	6525	5857	-668	-10.2	
25-29	8423	7185	-1238	-14.7	
30-34	8076	6635	-1441	-17.8	
35-39	6366	5813	-553	-8.7	
40-44	4681	4163	-518	-11.1	
45-49	2641	3109	468	17.7	
50-54	1681	1998	317	18.9	
55-59	1253	1541	288	23.0	
60-64	1184	1192	8	0.7	
65-69	1032	1024	-8	-0.8	
70-74	633	692	59	9.3	
75+	811	852	41	5.1	
Total	58945	53786	-5159	-8.8	
		Departures			
5-9	6002	6305	303	5.0	
10-14	4876	5635	759	15.6	
15-19	4940	4778	-162	-3.3	
20-24	8293	8843	550	6.6	
25-29	9377	10904	1527	16.3	
30-34	8432	9025	593	7.0	
35-39	6378	7876	1498	23.5	
40-44	4975	5851	876	17.6	
45-49	2978	4487	1509	50.7	
50-54	1863	2625	762	40.9	
55-59	1304	1662	358	27.5	
60-64	1342	1136	-206	-15.4	
65-69	1042	1060	18	1.7	
70-74	656		96	14.6	
75+	769	992	223	29.0	
Total	63227	71931	8704	13.8	

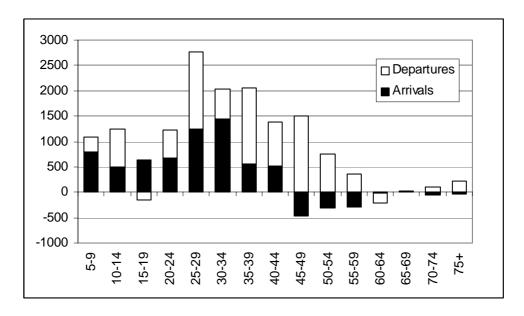
Table 3.14 and Figure 3.9 show that the shift was due to shifts in both arrivals and departures.

- the substantial rise in net losses at ages 25-29 was due about equally to a substantial rise in departures and a corresponding decline in arrivals from other States.
- among 30-34 year olds, falling arrivals was the more significant factor
- with older ages, the more significant factor was increased departures
- in the 45-59 age range the increase in the number of arrivals only partly offset a much larger rise in departures
- in the pre-retirement (60-64) age group, departures actually fell
- falling arrivals and rising departures also contributed about equally to the change in net migration at ages 20-24 and 10-14
- for 15-19 year olds it was fewer arrivals, rather than more departures, that triggered the small overall decline in that group's net migration balance.

The net outflow of young adults in their early twenties from South Australia is generally attributed to the greater range of employment opportunities available on the eastern seaboard. In explaining these movements, Jarvie (1989) has proposed a three tier hierarchy of Australian regions, arguing that the major metropolitan centres, especially Sydney and Melbourne, act as pivots in the Australian migration system, taking inmigrants from interstate and overseas, providing training and experience and recycling these migrants back down the urban hierarchy. The minor metropolitan centres (the other State capitals) were seen as fulfilling a similar role *vis-a-vis* their own non-metropolitan hinterlands.

Figure 3.9: Contribution of Change in Arrivals and Departures to the Overall Shift in Net Interstate Migration Between 1986-91 and 1991-96, South Australia

Source: Derived from ABS 1991 and 1996 Censuses (unpublished data)



In the context of the present Report, the critical factor lies in the ability of cities/States occupying the lower tiers to provide sufficient suitable opportunities to enable those trained in the major metropolitan centres to be recycled down to the lower hierarchy centres in numbers great enough to reduce the present imbalances between out-migration and inmigration.

Jarvie's analysis has recently been extended by Bell and Maher (1995) who distinguish seven types of region and suggest that the composition of the migration flows reflects the roles that each of these regions fulfils in the national space economy. While the persistent losses of young adults from South Australia attest to the stability of these roles, the shift in the age profile between 1986-91 and 1991-96 also underlines the impact of periodic events on the magnitude and composition of inter-regional migration flows.

For South Australia, the most significant such event was the economic crisis of the early 1990s and in terms of interstate migration it is clear that this exerted its primary impact on people of older working age, rather than on school leavers or young adults in their early twenties. While the State also registered a rise in losses of people aged 15-24, it was the 25-49 age range which accounted for the bulk of the increase in net outflows. Moreover, the evidence indicates that the economic disparities between South Australia and other parts of the country acted both to deter potential in-migrants, and to encourage out-migration. Among young adults, the rise in net losses was due about equally to these two effects; at older ages, however, it was the increase in departures, rather than reduced arrivals, that accounted for the growth in net outflows.

In terms of the present Report, the task for the Government is to undo the impacts of the economic crisis of the early nineties, and to replace them with initiatives which will work to halt the atypical exodus of 25-49 year olds which occurred at the time. If strategies can be put in place which halt this exodus, the likelihood is that these same strategies will also encourage the levels of inmigration to South Australia.

3.5.3 Household and family type

Although much of the preceding analysis has been concerned with the movements of individuals, it is widely recognised that most migration takes place in family or household groups. However, considerable care is needed in interpreting the composition of migration streams in terms of attributes such as family type, labour force status, occupation and industry, because these attributes are measured at the end of the intercensal period and may not be the same as at the time migration occurred. Indeed, some forms of migration are directly associated with a change in personal attributes. For example, marriage and divorce, as well as death, imply a change in household and family type and often lead to a change in residential location (Harris, 1997). Despite these difficulties, which do not apply to the attributes of age and sex, attributes such as household and family type do provide a realistic picture of migration outcomes, despite the need for caution in interpreting the causes and correlates of the movement.

Table 3.15 sets out the family and household composition of interstate arrivals, departures and net migration between 1991 and 1996. South Australia registered losses in all classes of family and household type but the major losses were of couple families, with and without

children, lone persons and people living in group households (households consisting of unrelated individuals).

One significant observation from Table 3.15 is the marked difference between the family and household structure of movers between 1991 and 1996, and those who moved between 1986 and 1991.

Table 3.15: Interstate Arrivals, Departures and Net Migration by Family and Household Type, South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 Censuses (unpublished data)

Family/household type		Net 1986-91			
турс	Arrivals	Departures	Net	Percent	
Couple only	4298	6403	-2105	32.1	-916
Two parent	6687	8675	-1988	30.4	199
One parent	2354	2317	37	-0.6	260
Lone person	4753	6001	-1248	19.1	81
Group household	1419	2643	-1224	18.7	-616
Other	254	274	-20	0.3	-90
Total	19765	26313	-6548	100.0	-1082

Note: This table counts households, not individuals.

In the earlier period, the loss was confined entirely to couple only and group households. However, the increased losses of people aged 25-49 from South Australia during the first half of the 1990s is reflected in substantial outflows of couple families with children and of lone adults, household types which the State gained in the previous intercensal period. Clearly, this difference is a result of the economic conditions experienced during this period, and the probability that these characteristics would occur during the 1996-2001 period become increasingly lessened as the State moves towards sustained economic recovery.

3.5.4 Marital status

The marital status composition of South Australia's interstate migration closely reflects the age and family breakdown examined above but also mirrors the changes that occurred between the late 1980s and the first half of the 1990s. The bulk of the State' net migration loss was of people who reported themselves as never married, or as currently married, at the time of the Census (Table 3.16). This was also the case in the 1986-91 interval. In contrast to 1986-91, however, South Australia also registered substantial net outflows of the separated and divorced between 1991 and 1996. Losses of these groups partly reflect the older age structure of the net outflow in the 1991-96 interval but the increased out-migration may also be a product of the more limited family ties among this group, permitting greater freedom to move to a more favourable economic climate.

Table 3.16: Interstate Arrivals, Departures and Net Migration by Marital Status, People Aged 15 and Over, South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 Censuses (unpublished data)

Marital status		Net 1986-91			
-	Arrivals	Departures	Net	Percent	
Never married	16527	24037	-7510	48.3	-2798
Married	19129	25669	-6540	42.1	-1911
Separated/divorced	5566	6881	-1315	8.5	93
Widowed	1143	1325	-182	1.2	108
Total	42365	57912	-15547	100.0	-4508

3.5.5 Birthplace

South Australia attracted substantial immigration from overseas during the 1950s, 1960s and early 1970s, but its share of the national intake declined steadily thereafter and is now well below pro-rata levels.

The overseas-born comprised some 27 percent of South Australia's net loss to interstate in between 1991 and 1996. This was a substantial reduction on the levels of around 40 percent recorded between 1981-86 and 1986-91. Within the overseas-born group, the rise in outflows was highest among people from Mainly Non-English-Speaking countries, but these were still outnumbered two to one by net losses of Mainly English-speaking settlers.

Table 3.17 reveals a continuing growth in outflows of more recent arrivals in the 1991-96 period. It is important to recognise that the periods of residence listed in table 3.17 are measured from the end of the relevant intercensal period. Thus in the case of the 1996 data, the group classified as resident for 0-4 years arrived in Australia between 1991 and 1996 and only a small proportion of these (those who arrived in the first half of 1991) were eligible to move interstate over the five year interval between 6th August 1991 and 6th August 1996. As a result, recent arrivals make up a relatively small proportion of the total net loss. The majority of the loss (73 percent) was of people who had been living in Australia for ten years or longer, though this proportion was smaller than that in the previous intercensal periods. This higher representation of long standing residents, though, is largely a function of their larger numbers, rather than of a higher propensity to leave the State. In fact, only four percent of immigrants resident in Australia for ten years or more at the 1996 Census left South Australia between 1991 and 1996 compared with 10 percent of those who had been in the country for between 5 and 9 years. This in turn is partly due to the older mean age, and hence lower average mobility, of the earlier arrivals.

As can be seen from Figure 3.10, there were marked differences in the age profile of South Australia's net interstate migration by birthplace group. Losses of Australia-born were concentrated in the young adult age ranges and there was actually a small net gain of Australia-born aged 55 and over. People aged 25-34 accounted for more than a third of the loss and 60 percent were aged between 15 and 34.

Table 3.17: Net Interstate Migration by Birthplace and Period of Residence, South Australia, 1981-86, 1986-91 and 1991-96

Source: ABS 1996 Census (unpublished data), Bell 1992 (Table 6.5 & 6.34), 1995 (Tables 3.5 & 3.6)

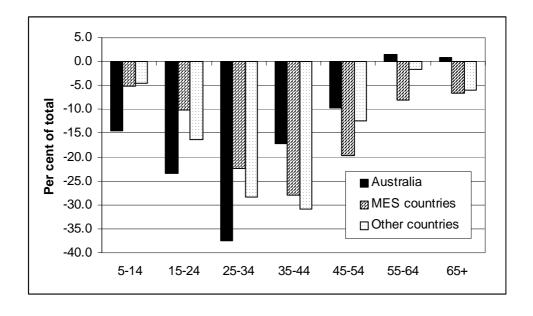
	1981-86	1986-91	1991-96	Percent	Percent	Percent
				1981-86	1986-91	1991-96
Birthplace ¹						
Australia	-5100	-2299	-13087	-59.2	-58.0	-72.9
MES countries	-2119	-1299	-3178	-24.6	-32.8	-17.7
Other countries	-1399	-366	-1681	-16.2	-9.2	-9.4
Total	-8618	-3964	-17946	-100.0	-100.0	100.0
Period of residence	ce of oversea	s-born ²				
0-4 yrs	-31	21	-245	-0.9	1.3	-5.2
5-9 yrs	-470	-408	-1042	-13.3	-25.2	-21.9
10+ yrs	-3043	-1230	-3465	-85.9	-76.1	-72.9
Total	-3544	-1617	-4752	-100.0	-100.0	-100.0

Note 1: Excludes people who did not state their birthplace

Note 2: Excludes people who did not state their year of arrival; periods of residence are measured from the end of the relevant intercensal periods.

Figure 3.10: Net Interstate Migration by Birthplace Group, South Australia, 1991-96

Source: ABS 1996 census (unpublished data)



In contrast, immigrants from MES countries displayed a much older age profile with almost half the net outflow in the 35-54 age range and 15 percent being aged 55 or over. Most of the State's MES community came to Australia in the early post-war decades. The MES-born community is therefore much older, on average, than both the Australia-born and other immigrant groups. The age profile of the outflow of 'Other' immigrant groups is therefore intermediate between that of the Australia-born and that of the MES-born.

The net result of these differences in age profiles are:

- the Australia-born accounted for a declining share of the loss with increasing age: they made up 90 percent of the net outflow at ages 15-24, 80 percent at ages 25-34 and 60 percent at aged 35-54, while at ages 55 and over this loss reversed to a gain.
- losses of MES-born settlers outnumber the outflows of other immigrants in all age categories but the latter were most significant at ages 15-34 (where they comprised 40-45 percent of the overseas-born) and least numerous in the 55-64 age group (were they comprised less than 10 percent).
- there were losses in both the MES and Other countries categories beyond age 55.

3.5.6 Labour force status

There is a strong link between net migration loss and changes in labour force composition. For example, between 1976-81 and 1981-86 the level of net out-migration halved and was due entirely to a fall in the loss of employed workers, while the loss of unemployed and people outside the labour force actually rose slightly during the period. The aggregate outflow halved again between 1981-86 and 1986-91 but as Table 3.18 shows, this reduction had quite different origins. On this occasion, net losses of employed workers increased over the period and the lower aggregate loss was due entirely to gains of unemployed and people outside the labour force. This represented a reversal of the pattern evident in the first half of the 1980s. Between 1991 and 1996, yet a different relationship between labour force characteristics and net migration prevailed. In this period, flows of unemployed persons and people outside the labour force were closely balanced, and the entire net loss of people aged 15 and over can be traced to outflows of employed workers.

Table 3.18: Net Interstate Migration by Labour Force Status, People Aged 15 and Over, South Australia, 1976-81 to 1991-96

Source: ABS 1996 Census (unpublished data), Bell and Maher (1995, Table 4.16)

	1976-81	1981-86	1986-91	1991-96
Numbers				
Employed	-12336	-6488	-7252	-15081
Unemployed	20	-429	1072	19
Not in labour force	-528	-741	1392	-26
Total	-12844	-7658	-4788	-15088
Percent				
Employed	96.0	84.7	151.5	100.0
Unemployed	-0.2	5.6	-22.4	-0.1
Not in labour force	4.1	9.7	-29.1	0.2
Total	100.0	100.0	100.0	100.0

The change in 1991-96, compared with 1986-91 was, therefore, due to a rise in losses of employed workers *and* the elimination of previous gains of unemployed and people outside the labour force

Table 3.19 sets out the underlying flows for each of the three labour force groups together with associated rates of in-, out- and net movement. Although net migration levels of unemployed persons and people outside the labour force was small, there were nevertheless substantial cross-border flows of both groups. The unemployed are one of the most mobile groups in the population and their rates of inward and outward movement between 1991-96 were substantially above those of employed workers or people outside the labour force. The high mobility levels of the unemployed partly reflects the relatively young age profile of this group, but above average rates of migration among this group prevail even when the data are standardised for age (Bell & Maher 1995). Similarly, below average rates of movement among those outside the labour force are partly due to their older age composition, since this group include those who have retired from the workforce, as well as the non-working spouses of employed workers, and younger people still studying.

Table 3.19: Arrivals, Departures and Net Interstate Migration by Labour Force Status, People Aged 15 and Over, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

	Arrivals	Departures	Net
Numbers			
Employed	23238	38319	-15081
Unemployed	4850	4831	19
Not in labour force	14389	14415	-26
Total	42477	57565	-15088
Rates (per thousand of the I	1991 population of Sout	h Australia in the relevan	t category)
Employed	39.3	64.8	-25.5
Unemployed	77.3	77.0	0.3
Not in labour force	33.8	33.9	-0.1
Total	39.3	53.3	-14.0

Table 3.20 details the relationship between age, labour force status and net migration levels. Its key implication is that between 1991 and 1996, the bulk of the net loss in all age groups comprised relatively young, employed workers. Since employment status is measured at the end of the intercensal period, this net balance effectively means that out-migrants were largely successful in finding job opportunities in other parts of Australia. Further, this clearly suggests that the availability of employment was a key factor behind the State's net migration loss over this five year period. In subsequent sections of this report, the strong linkage between employment opportunities and migration will be further explored.

As Table 3.21 shows, South Australia lost employed workers to all other parts of the country, with the highest net losses to Queensland, New South Wales and Western Australia. In the case of Queensland and Western Australia, there were also losses of unemployed and people outside the labour force, but exchanges with New South Wales, Victoria and the Northern Territory yielded net gains of these two groups. Thus, the overall

net zero balance among the unemployed and people outside the labour force obscures the fact that while the State lost both groups to Queensland, these net outflows were entirely offset by corresponding gains from New South Wales, Victoria and the Northern Territory.

Table 3.20: Arrivals, Departures and Net Interstate Migration by Labour Force Status, People Aged 15 and Over, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Age	Employed	Unemployed	Not in the labour
			force
15-24	-3706	198	104
25-34	-5743	-90	-209
35-44	-3355	-11	-24
45-54	-1956	-50	64
55-64	-327	-40	139
65+	6	12	-100
Total	-15081	19	-26

Table 3.21: Net Interstate Migration by Labour Force Status and Origin/Destination, People Aged 15 and Over, South Australia, 1986-91 and 1991-96

Source: ABS 1991 and 1996 census (unpublished data)

	Employed	Unemployed	Not in labour	Total
			force	
1991-96				
NSW	-2789	295	758	-1736
Vic	-1099	411	647	-41
Qld	-6377	-871	-1974	-9222
WA	-2005	-48	-251	-2304
Tas	-20	4	-1	-17
NT	-1980	211	804	-965
ACT	-811	17	-9	-803
Total	-15081	19	-26	-15088
1986-91				
NSW	-216	816	1713	2313
Vic	-1509	377	711	-421
Qld	-3020	-447	-1506	-4973
WA	-948	2	-106	-1052
Tas	24	7	-122	-91
NT	-1130	241	653	-236
ACT	-453	76	49	-328
Total	-7252	1072	1392	-4788

Table 3.21 is also instructive in identifying the magnitude of the employed/retired component of net migration from South Australia to Queensland. Between 1991 and 1996, employed persons comprised 69.1 percent of net interstate migration, compared with 21.4 percent for persons not in the labour force.

The profile for 1991-96 is remarkably similar to that from the previous intercensal period. Although aggregate losses to interstate between 1986 and 1991 were only a third the level of the 1990s, the same pattern is evident with losses of employed workers offset by gains of unemployed and people outside the labour force in exchanges with New South Wales, Victoria and the Northern Territory, but not Queensland. Indeed, even the overall scale of net movements among these two groups has not changed greatly. In exchanges with Victoria, Western Australia, Tasmania and the Territories, gains and losses of unemployed and people outside the labour force were much the same in the two periods. It was the reduction in gains from New South Wales and the rise in losses to Queensland that eroded the State's overall gain of these two groups from one period to the next. However, it was the much higher net loss of employed workers that accounted for the bulk of the increase in net interstate losses and, as Table 3.21 shows, this increase occurred in exchanges with all States.

Compared with 1986-91, between 1991 and 1996, South Australia:

- recorded increased losses of employed workers to New South Wales, and reduced gains of unemployed and people outside the labour force
- continued exchanges with Victoria at much the same level, again characterised by losses of employed workers from South Australia and gains of the other two groups
- recorded a substantial rise in losses of employed workers to Queensland and smaller rises in the outflow of unemployed and people outside the labour force
- doubled its loss of employed workers to Western Australia and recorded smaller outflows of the other two groups
- continued to have closely balanced exchanges with Tasmania
- recorded a sharp increase in the loss of employed workers to the Northern Territory but continued to gain unemployed and people outside the labour force.
- registered a sharp rise in the loss of employed workers to the ACT, with small gains of the other two groups.

The net losses of employed labour to the eastern States reflected the more buoyant economies and the greater range and number of job opportunities available in the major cities of the eastern seaboard. These include both the higher status, professional jobs that are increasingly concentrated in Sydney and Melbourne, and the rapidly expanding employment in the services sector and in tourism, much of which is concentrated in southeast Queensland.

The reverse flows, leading to net gains of unemployed and those outside the employed workforce from New South Wales and Victoria, on the other hand, may well reflect the search for cheaper living costs, especially housing, outside the major metropolitan centres. Wulff and Bell (1997) identified significant flows of low income earners and the unemployed away from Australia's largest cities and Adelaide was one key destination. The data in Table 24 also underline the specialised economic role of the Territories (Bell and

Maher, 1995) which tend to be attractive to job seekers, but fail to retain in-migrants once they become unemployed or leave the labour force.

3.5.7 Occupation

As noted earlier, considerable care is needed in interpreting the composition of migration streams in terms of attributes such as occupation and industry, because these characteristics are measured at the end of the intercensal period and may not be the same as at the time migration occurred. Indeed, alterations in labour force status, occupation or industry may be directly associated with migration. This is especially the case with long distance moves because interstate travel commonly involves a change of job. It follows that particular care is needed in analysing the composition of the net migration balance because this represents the outcome of two opposing flows each potentially involving different changes in labour force characteristics. Interpreting the causes and correlates of the aggregate loss from these data is therefore somewhat perilous. However, the net data do provide a realistic picture of migration outcomes: that is, of the net impact of interstate migration in terms of job change.

As Table 3.22 shows, South Australia lost employed workers in all occupational groups but the largest losses were in the white collar occupations. Professionals alone comprised thirty percent of the net outflow and together with associate professionals and managers/administrators, accounted for more than half the total net loss of employed labour. There were also substantial outflows of Tradespeople and of Clerical, sales and service workers (mainly at the intermediate skill level). In contrast the losses of Production and transport workers, and of Labourers and related workers were small.

The rate of net outflow at the high skill, white collar end of the employment spectrum was consistently above that for lower skilled clerical and manual workers. Professionals represented 17 percent of the 1991 workforce but accounted for 30 percent of the net interstate loss, whereas tradespeople, production workers and labourers were all underrepresented in the outflow.

Table 3.22: Arrivals, Departures and Net Interstate Migration by Occupation, People Aged 15 and Over in the Employed Workforce, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Occupation	Arrivals Departures		Net	Percent	Percent of
					1991
					workforce
Managers & Administrators	2456	3879	-1423	9.3	10.3
Professionals	4886	9427	-4541	29.8	17.1
Associate Professionals	2759	5189	-2430	15.9	11.3
Tradespersons & Related Workers	2916	4135	-1219	8.0	13.1
Advanced Clerical & Service Wkrs	761	1491	-730	4.8	3.9
Int Clerical, Sales, Service Wkrs	3840	6708	-2868	18.8	16.7
Int Production & Transport Wkrs	1676	2224	-548	3.6	8.9
Elem Clerical, Sales, Service Wkrs	1821	3031	-1210	7.9	8.7
Labourers & Related Workers	2281	2552	-271	1.8	10.0
Total	23396	38636	-15240	100.0	100.0

Between 1991 and 1996, South Australia lost employed labour to all States and Territories. However, the occupational mix differed markedly between States. Net outflows to New South Wales, Victoria and the ACT (principally Sydney, Melbourne and Canberra) were dominated by Professionals with smaller numbers of Associate professionals, Managers and Intermediate clerical workers. Queensland, Western Australia and the Northern Territory, on the other hand, tended to attract fewer skilled white collar workers but much larger proportions of tradespeople, elementary clerical and manual workers. Particular parts of Australia clearly offer specific types of economic opportunity (Table 3.23) and this is reflected in the occupational profile of South Australia's 1991-96 interstate migration loss. At the same time, it is important to recall that these losses do not represent a simple one way flow of skilled expertise. As Table 3.22 demonstrates, South Australia continued to attract professionals and other occupational groups throughout the 1991-96 period: it was simply the net balance that was negative.

Table 3.23: Net Interstate Migration by State or Territory and Occupation, People Aged 15 and Over in the Employed Workforce, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Occupation	NSW	Vic	Qld	WA	Tas	NT	ACT
Numbers							
Managers & Administrators	-359	-246	-466	-89	-24	-74	-162
Professionals	-1317	-645	-1207	-501	-93	-413	-365
Associate Professionals	-457	-302	-1030	-240	-20	-292	-92
Tradespersons & Related Workers	52	196	-813	-312	15	-343	-14
Advanced Clerical & Service Wkrs	-200	-102	-194	-103	-11	-105	-15
Int Clerical, Sales, Service Wkrs	-523	-248	-1177	-332	22	-489	-103
Int Production & Transport Wkrs	30	105	-420	-254	25	-57	23
Elem Clerical, Sales, Service Wkrs	-165	-34	-653	-175	3	-170	-10
Labourers & Related Workers	63	258	-459	-163	46	-1	-15
Total	-2876	-1018	-6419	-2169	-37	-1944	-753
Percent							
Managers & Administrators	12.5	24.2	7.3	4.1	64.9	3.8	21.5
Professionals	45.8	63.4	18.8	23.1	251.4	21.2	48.5
Associate Professionals	15.9	29.7	16.0	11.1	54.1	15.0	12.2
Tradespersons & Related Workers	-1.8	-19.3	12.7	14.4	-40.5	17.6	1.9
Advanced Clerical & Service Wkrs	7.0	10.0	3.0	4.7	29.7	5.4	2.0
Int Clerical, Sales, Service Wkrs	18.2	24.4	18.3	15.3	-59.5	25.2	13.7
Int Production & Transport Wkrs	-1.0	-10.3	6.5	11.7	-67.6	2.9	-3.1
Elem Clerical, Sales, Service Wkrs	5.7	3.3	10.2	8.1	-8.1	8.7	1.3
Labourers & Related Workers	-2.2	-25.3	7.2	7.5	-124.3	0.1	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.5.8 Industry

Like occupation, industry of employment may change between the time of migration and the date of the Census and must therefore be interpreted with care. The data do, nevertheless, provide a good indication of the types of industries to which out-migrants from South Australia were attracted, and the South Australian industries to which in-migrants were

drawn. As in the case of occupation data, the net profile also indicates the overall effect of migration in terms of job growth.

Table 3.24 reveals that South Australia registered net outflows to interstate in all industry categories except for agriculture where there was a small net gain. In absolute terms, the largest net losses occurred in the Property and business services sector, in Government administration and defence, in Health and community services, in Retail trade, and in the Accommodation, cafes and restaurants sector. These five industry sectors together accounted for 54 percent of the State's net loss of employed workers. Other sectors registering more moderate losses were Construction, Cultural and recreational services, Wholesale trade and Education, but there were also significant outflows in Manufacturing, Mining, Transport, Finance and insurance and Personal services. Only Agriculture, Utilities and Communications recorded losses of less than 250 people.

Table 3.24: Arrivals, Departures and Net Interstate Migration by Industry, People Aged 15 and Over in the Employed Workforce, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Occupation	Arrivals	Departures	Net	Percent	Percent of	Employment
1		1			1991	change
					workforce	1991-96
Agriculture	1032	992	40	-0.3	5.7	765
Mining	285	836	-551	3.6	0.7	-453
Manufacturing	2897	3369	-472	3.1	15.1	3682
Utilities	21	120	-99	0.6	0.8	-2672
Construction	838	1856	-1018	6.7	5.2	-470
Wholesale Trade	1376	2280	-904	5.9	5.9	974
Retail Trade	2764	4441	-1677	11.0	13.8	546
Accom, Cafes & Restaurants	1423	2998	-1575	10.3	4.5	3489
Transport and Storage	1063	1708	-645	4.2	3.8	-683
Communication Services	439	640	-201	1.3	1.9	2067
Finance and Insurance	1044	1806	-762	5.0	3.5	-6005
Property & Business Services	2228	4234	-2006	13.1	8.8	13857
Gov Admin & Defence	2328	3849	-1521	9.9	4.6	-3872
Education	1338	2227	-889	5.8	7.5	2755
Health & Comm Services	2438	4035	-1597	10.4	11.7	6401
Cultural & Rec Services	691	1684	-993	6.5	2.3	2335
Personal and Other Services	909	1341	-432	2.8	4.1	2630
Total	23114	38416	-15302	100.0	100.0	25346

3.6.9 Qualifications

Table 3.25 describes the qualifications profile of interstate arrivals and departures over the 1991-96 intercensal period. The clear conclusions is that South Australia's net loss over this period involved a significant outflow of skilled workers. Almost a third of the net loss was of people with a Bachelor's degree or higher; 10 percent reported an undergraduate or associate diploma; and a further 12 percent claimed skilled vocational qualifications.

People with a diploma or above made up 41 percent of the net outflow whereas less than 15 percent of the State's 1996 adult population reported these qualifications.

Interstate migrants with degree qualifications were strongly represented among both arrivals and departures. This is partly a product of the comparatively young age structure of more qualified people but it also reflects the higher mobility of these groups, independent of age. Significantly, the better qualified were more strongly represented among departures than among arrival. Young adults accounted for a significant component of the outflow of well qualified people but they did not make up the whole of this loss (Table 3.26), and one third of the outflow of those with degrees of higher was made up of people aged 35 and over. While there is a clear, positive association between age and qualifications, the well qualified were still strongly represented in the net loss at older ages. People with degrees or diplomas made up 30 percent of the net loss of 15-24 year olds, 52 percent at ages 25-34, 37 percent at ages 35-44, 40 percent at ages 45-54, 41 percent at ages 55-64, and 19 percent at ages 65 and over.

Table 3.25: Arrivals, Departures and Net Interstate Migration by Qualifications, People Aged 15 and Over, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Qualifications	Arrivals	Departures	Net	
Numbers				_
Degree or higher	6041	11205	-5164	
Diploma	3049	4729	-1680	
Skilled vocational qualification	4535	6523	-1988	
Basic vocational qualification	1750	2655	-905	
Inadeq desc/not stated	3326	4188	-862	
No qualifications	25370	31311	-5941	
Total	44071	60611	-16540	
Percent of total				Percent of
				1996 State
				population
Degree or higher	13.7	18.5	31.2	8.6
Diploma	6.9	7.8	10.2	5.8
Skilled vocational qualification	10.3	10.8	12.0	10.9
Basic vocational qualification	4.0	4.4	5.5	3.2
Inadeq desc/not stated	7.5	6.9	5.2	8.6
No qualifications	57.6	51.7	35.9	62.9
Total	100.0	100.0	100.0	100.0

The evidence, therefore, points to a substantial brain-drain from the State over the 1991-96 intercensal period, a loss which is almost certainly connected to the State's depressed economic circumstances relative to other parts of the country during the first half of the 1990s. It follows that any improvements in the State's economy, and accompanying

increases in job opportunities for the skilled and highly qualified section of the workforce, should act to reduce the extent of the apparent brain drain from the State.

Table 3.26: Net Interstate Migration by Age and Qualifications, People Aged 15 and Over, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Qualifications	Age						
	15-24	25-34	35-44	45-54	55-64	65+	
Degree or higher	-969	-2576	-1039	-549	-32	1	
Diploma	-273	-725	-351	-262	-33	-36	
Skilled vocational qualification	-381	-687	-499	-300	-80	-41	
Basic vocational qualification	-224	-297	-301	-58	-21	-4	
Inadeq desc/not stated	-339	-189	-241	-94	-30	31	
No qualifications	-1864	-1913	-1297	-773	36	-130	
Total	-4050	-6387	-3728	-2036	-160	-179	

3.5.10 Income

Table 3.27 reveals that between 1991 and 1996 South Australia registered net losses in all income categories. The largest net outflows were in the middle income groups. However, low income earners were more strongly represented among in-migrants (52 percent compared with 41 percent) whereas those on incomes of \$600 per week or more, featured more strongly among those leaving the State (30 percent compared with 21 percent).

Table 3.27: Arrivals, Departures and Net Interstate Migration by Income, Persons Aged 15 and Over, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Weekly income	Arrivals	Departures	Net
Numbers			
\$299 or less	21714	23075	-1361
\$300 - \$599	10957	16392	-5435
\$600 - \$ 999	6074	11397	-5323
\$1000 or more	2745	5421	-2676
Total	41490	56285	-14795
Percent			
\$299 or less	52.3	41.0	9.2
\$300 - \$599	26.4	29.1	36.7
\$600 - \$ 999	14.6	20.2	36.0
\$1000 or more	6.6	9.6	18.1
Total	100.0	100.0	100.0

Excludes people who did not state their income

As can be seen from Table 3.28, the loss of low income earners cannot be attributed to an outflow of retirees on Government pensions, as more than 80 percent of the loss in the lowest income group was accounted for by people aged between 15 and 44. In the case of high income groups, their loss was due principally to people in the early and mid stages of their working lives, and included relatively few people aged 55 or over. The migration loss comprised primarily younger adults free to move to alternative employment opportunities elsewhere, rather than a flight of more senior personnel. In terms of the current Report, therefore, if this trend has continued since 1996, the implications are for policy initiatives aimed at restructuring the South Australian economy in ways that attract this group.

Table 3.28: Net Interstate Migration by Age and Income, South Australia, 1991-96

Source: ABS 1996 Census (unpublished data)

Age	Weekly personal income					
	\$299 or less	\$300 - \$599	\$600 - \$ 999	\$1000 or more	Total	
15-24	-306	-1888	-987	-116	-3297	
25-34	-526	-1941	-2450	-1026	-5943	
35-44	-290	-917	-1155	-984	-3346	
45-54	-182	-612	-634	-492	-1920	
55-64	3	-71	-93	-52	-213	
65+	-60	-6	-4	-6	-76	
Total	-1361	-5435	-5323	-2676	-14795	

Excludes people who did not state their income

3.5.11 Summary

South Australia's interstate migration profile has changed in a number of respects between the 1980s and the first half of the 1990s. Key features identified in this section include:

- Prior to 1991, the age profile of South Australia's net interstate losses had remained remarkably stable, with net outflows concentrated primarily among young adults in the 20-24 age group. The rise in outflows in the early 1990s saw a marked rightwards shift, or ageing, of this profile resulting in peak net gains occurring at ages 25-29 rather than 20-24, and a substantial increase in net losses at older working ages from 30 to 49. Losses in the pre-retirement and retirement age groups continued to be small.
- The composition of the losses by marital status and family/household type reflects the changing age structure of out-migration from the State. The bulk of the outflow was of people who reported themselves as never married or who were married at the time of the Census, but there was also a loss of the separated and divorced, which did not occur in the previous interval. South Australia lost couple only households and people living in group households at much the same rate in 1991-96 as had occurred in 1986-91, but in 1991-96 there were also substantial losses of couple families with children, and of people living alone.
- The labour force composition of South Australia's net migration loss has changed radically. Between 1986 and 1991 South Australia lost 7,250 employed workers to

other States and Territories but one third of this loss was offset by gains of unemployed and people outside the labour force. In the 1991-96 interval the loss of employed workers had more than doubled to a little over 15,000 and the compensating gains had entirely disappeared. This change in the balance of unemployed and people outside the labour force was due primarily to a fall in the gains from New South Wales and a rise in losses to Queensland.

- South Australia lost employed workers in all occupational groups but the largest net outflows were in the white collar occupations. Professionals alone comprised 30 percent of the net outflow and together with associate professionals and managers/administrators, accounted for more than 50 percent of the total net loss of employed labour. Net outflows of lower skilled production workers and labourers were comparatively small. In terms of industry of employment, the largest net losses occurred in the Property and business services sector, in Government administration and defence, in Health and community services, in Retail trade, and in the Accommodation, cafes and restaurants sector.
- The high skill profile of the net loss which emerges from analysis of the labour force data is confirmed by data on level of qualifications. More than one half the net loss of people aged 15 and over is accounted for by people with skilled vocational qualifications or higher, and 31 percent had degrees or higher.
- Between 1991 and 1996, South Australia lost people at both ends of the income spectrum, with low income earners more strongly represented among arrivals than among departures.

The forces generating South Australia's interstate migration patterns reflect the State's position in the Australian economic system. Generally, it has been on the periphery, rather at the centre of Australian economic activity, and has acted as a source of labour for other parts of the country, rather than as a primary destination. There have been two principal exceptions to this norm - during the early post-war years when the State recorded a period of intensive manufacturing development, and in the early 1970s when leadership in social reform attracted people from interstate.

This rise in losses is during the 1990s was almost certainly linked to the State's deteriorating economic performance in the wake of the State Bank collapse, and the stringent economic policies subsequently introduced in an effort to curb State debt. Downsizing and outsourcing in the public sector, coupled with the exigencies of structural change and microeconomic reform throughout the economy, clearly generated a massive bout of labour shedding from South Australian enterprise with a consequent loss of labour to other States and Territories.

The rising losses which occurred during the 1991-96 period might be expected to abate as the economy recovers and returns to its equilibrium state. Victoria, which experienced an economic crisis during the 1990s similar to that of South Australia, experienced massive net losses in the early 1990s which reversed in the latter part of the decade to generate a net gain, its first since the 1950s. In Victoria's case, the catalyst for the turnaround represented a combination of renewed economic vigor, coupled with substantial return migration by those who left in the crisis years of the early 1990s. Given that South Australia's economic crisis peaked a year or so after that in Victoria, and that net outflows have begun to decline,

it may be that the trend observed between 1991 and 1996 will culminate in net migration gains. However, whether this occurs and how long it persists remains to be seen.

3.6 CONCLUSION

This chapter has comprehensively analysed secondary data relating to interstate migration to and from South Australia over the last decade or so. This has clearly demonstrated that South Australia has been a net outmigration State for most of the last century. However, the net losses of the early 1990s were the largest in the history of the State, in the wake of the collapse of the State Bank. The loss was not only an important factor in the low levels of population growth but the migration was selective of highly skilled and educated groups and young adult groups. When this is put together with the significant net losses of the previous fifteen years the cumulative loss of young adults and the children they subsequently have has been substantial. Moreover there can be no doubt that this has been a brain drain net outmigration. This has important demographic and economic implications for the State. The late 1990s saw a continuation of net migration losses but at a lower and reducing rate. Secondary data has been able to show us the scale, trends and composition of interstate migration to and from South Australia. It has not however been able to tell us about the motivations of migrants and whether or not they intend to return to South Australia. To address this issue we need to turn to primary data.

CHAPTER FOUR

PATTERNS OF SKILLED MIGRATION INTERSTATE

4.1 INTRODUCTION

It is clear from the previous chapter that South Australia has experienced a 'brain drain' for most of the last three decades. Any attempt to encourage interstate migration needs to encourage returnees who ...

- Do not compete with South Australian residents for jobs.
- Fill vacancies which are blockages acting as constraints in the development of the economy.

There is no value in a policy which brings people back to the State who are not able to get a job or do so at the expense of people already living in South Australia. Accordingly the program needs to be focussed on people with skills so it is useful to examine where graduates from the South Australian universities have gone to and what skills they possess. The chapter utilises information collected in the annual surveys conducted by the Graduate Careers Council of Australia as well as the two surveys undertaken especially for the study as referred to in Chapter One.

4.2 EXTENT TO WHICH SOUTH AUSTRALIAN GRADUATES LEAVE THE STATE

One feature of Australians attending university is that more than in other OECD nation they tend to attend a university in their home State and get their first job after graduating in that State. This is a paradox in a country with the highest levels of personal and residential mobility in the world. In other developed countries there are strong traditions of children leaving home to attend university in a State, province or city other than that in which they have grown up with their parents. Some would argue that the Australian pattern is not necessarily a desirable one in terms of the development of independence among university students. There are trends of increased interstate movement to attend Universities and there has been concern expressed by South Australian universities that in the last few years undergraduate scholarship schemes devised by some eastern States universities to attract students from other States with very high Year 12 results have been effective in attracting some of the highest achieving Year 12 students out of the State. While the numbers involved in this are small it is clearly selective of some of the best young minds in the State. While the main focus here is clearly on people who have completed their university studies in South Australia and then leave, the smaller group who go interstate in order to study must be of some concern. The concern is not so much that these people are attracted interstate but more that the State should at least be able to attract an equivalent number of talented young people from other States to South Australian universities and perhaps should have policies and programs in place in order to achieve this.

Nevertheless it is our main focus here to consider the destinations of graduates from South Australian universities. Table 4.1 shows the destinations of 1999 graduates from each of the States and Territories and some interesting patterns are in evidence. It will be noted that

there is considerable variation between States and Territories in the extent to which graduates gain a job locally. Not surprisingly the ACT has the lowest retention rate with almost a third of its graduates working in neighbouring New South Wales. It will also be noted, however, that Tasmania also has a relatively low retention rate with more than a quarter of graduates moving interstate and almost a tenth across Bass Strait to Victoria. South Australia has the next lowest retention rate with 83 percent of graduates getting a job within the State. Victoria and Western Australia have the highest retention rates followed by New South Wales and the Northern Territory.

Table 4.1: Destination of Graduates from Australian Universities in 1999

Source: 1999 Graduate Destination Survey

	Employment State										
Study State	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Percent	n	
ACT	60.3	31.0	4.9	1.4	0.0	0.5	0.3	0.3	99	345	
NSW	5.2	90.0	1.6	1.8	0.2	1.2	0.0	1.2	101	7263	
Vic	0.7	2.5	93.2	1.0	0.9	0.9	0.4	0.3	100	5425	
Qld	1.2	5.2	2.2	89.9	0.5	0.4	0.2	0.4	100	3477	
SA	1.4	4.8	5.1	1.4	83.0	1.2	0.9	2.1	100	1869	
WA	0.9	2.5	1.8	0.6	0.6	92.8	0.4	0.4	100	2093	
Tas	3.9	5.4	9.5	3.2	2.3	3.9	71.0	0.9	100	441	
NT	1.4	2.8	0.7	4.2	1.4	0.0	0.0	89.6	100	144	
n	732	7133	5443	3377	1659	2086	387	240		21057	

Table 4.2: Percentage of SA and NSW Graduates Moving Interstate on Graduation

Source: 1992-1999 Graduate Destination Surveys

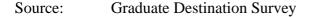
Year	SA	NSW
1992	9.8	9.3
1993	15.5	6.1
1994	14.4	6.2
1995	14.3	7.4
1996	17.1	7.5
1997	18.3	7.0
1998	16.0	6.8
1999	17.0	10.0

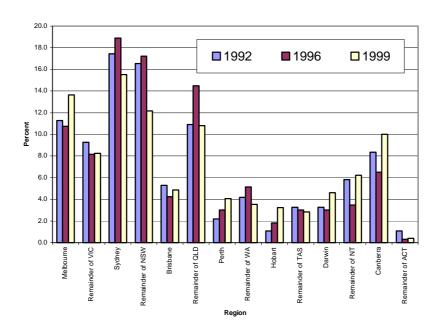
It is instructive to examine trends in the retention rate during the 1990s. Table 4.2 compares retention rates in New South Wales and South Australia over the 1992-99 period. New South Wales and South Australia had similar levels of leakage of graduates to other States. However, the fallout from the collapse of the State Bank saw a dramatic reduction in jobs for new graduates, especially in the State Government and the leakage rate increased substantially. It reached a peak of 18.3 percent in 1997 and has declined slightly since.

4.3 WHERE DO SOUTH AUSTRALIAN GRADUATES MOVING INTERSTATE GO?

The interstate destinations of South Australian graduates in 1992, 1996 and 1999 are depicted in Figure 4.1 and it is clear that Sydney and the remainder of New South Wales was the main destination of graduates leaving South Australia. Sydney was still the dominant destination in 1999 but its share of the graduates interstate had declined since 1996. This partly reflects the resurgence of economic and population growth in Melbourne which suffered economic depression in the late 1980s and early 1990s but recovered strongly in the late 1990s. This is also reflected in the interstate migration data considered in Chapter Three. New South Wales destinations outside of Sydney have been important but like Sydney attracted a smaller share of the 1999 outflow. The substantial flow to non-metropolitan New South Wales and Victoria partly reflect significant flows to regional cities in both States.

Figure 4.1: Interstate Destinations of South Australian Graduates, 1992, 1996 and 1999





The national capital could be anticipated to be a significant magnet for graduates from South Australia – since many move in to positions with Commonwealth Government agencies. Hence a tenth of graduates moving interstate go to Canberra. Queensland was the main destination of outmigrants from South Australia for part of the 1990s (Chapter Three) but this was not the case for graduates. It is interesting to note that the majority of those moving to Queensland move to locations outside Brisbane, although many go to other parts of Southeast Queensland. South Australia's strong historical links with the Northern Territory are evident in the significant number of graduates moving northwards.

It is important to observe that the data collected by the alumni associations in the various universities have the *current address* of past graduates. This is, of course, relevant if it is decided to establish any data base of South Australians interstate to be approached concerning a return to the State. This is discussed in greater detail in a later chapter. In the present context it allows us to use geographical information systems (GIS) to establish whether there are patterns in the settlement of the migrants interstate. Accordingly, Figure 4.2 shows the distribution of South Australian graduates of 1992, 1996 and 1999 in the Sydney metropolitan area. When comparing these patterns with the socio-economic characteristics of the population of Sydney in the social atlas of the city (ABS 1998b) it is clear that there are some interesting associations ...

- There are concentrations in the inner parts of the city. This indicates a high propensity to settle in rental accommodation close to the city centre to take advantage of the inner city lifestyle.
- There are significant numbers in the older Western suburbs indicating that some recent arrivals live in new housing areas on the periphery.
- There is a tendency to settle in the high status suburbs in coastal areas, the north shore and parts of the southern suburbs.

Figure 4.3 depicts the distribution of graduates in Melbourne and there is also a tendency to concentrate in the inner suburbs. There is also a concentration in the high status (ABS 1998c) eastern suburbs. The patterns in Brisbane (Figure 4.4) also indicate similar associations with high income suburbs (ABS 1998d). A continuing theme is the concentration in the inner suburbs. This indicates that many of the graduates tend to live in rental accommodation in the inner suburbs of the largest cities of the eastern seaboard. While gentrification and urban consolidation are meaning that more Australians are choosing an inner suburban location in the long term, the traditional pattern is for young people to spend several years in these areas but to move when they begin family formation and take out a mortgage. As is indicated later in the report it is at their life cycle stage that young people from South Australia in the eastern States may be most amenable to a return to their State of origin.

The patterns of distribution of interstate migrants are similar for the two samples interviewed. Firstly, Table 4.3 indicates that New South Wales and the ACT were the dominant destinations, accounting for more than a half of respondents. This points at Canberra as an important destination of graduates from South Australia. Queensland and Victoria account for another quarter of the migrants.

South Australians moving interstate tend to be relatively mobile on arriving at their destination. At the time of the survey (July, 2000), 60.2 percent of respondents had not remained at their first interstate destination. Most (29.3 percent) had made only one move from their original interstate destination, while 22.7 percent had made two moves and 12.0 percent had made three moves. Nevertheless, 18.7 percent had made more than five moves subsequent to arriving at their initial interstate destination. Three quarters of people leaving South Australia remained in the State to which they moved.

Figure 4.2: Sydney Metropolitan Area, Number of South Australian University Graduates Who Gained Employment by Postcode, 1992-99 Graduates

Source: Graduate Destination Survey

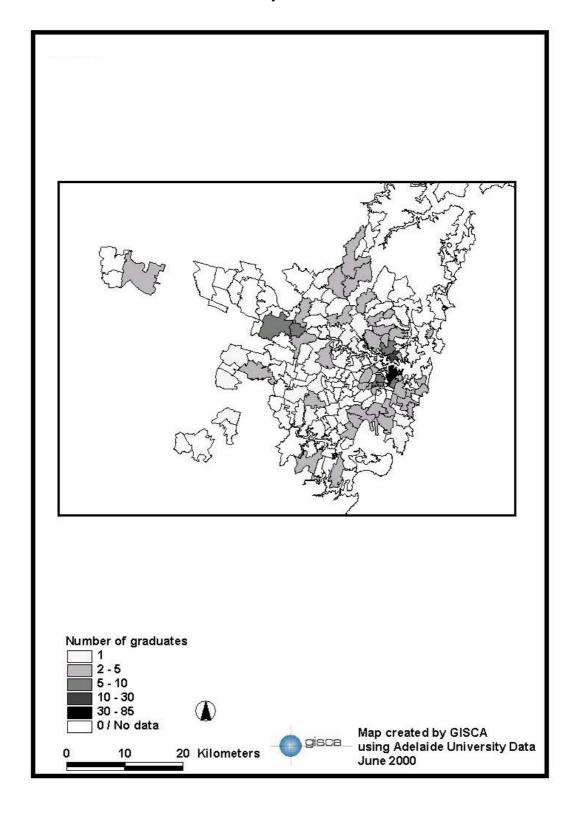


Figure 4.3: Melbourne Metropolitan Area, Number of South Australian University Graduates Who Gained Employment by Postcode, 1992-99 Graduates

Source: Graduate Destination Survey

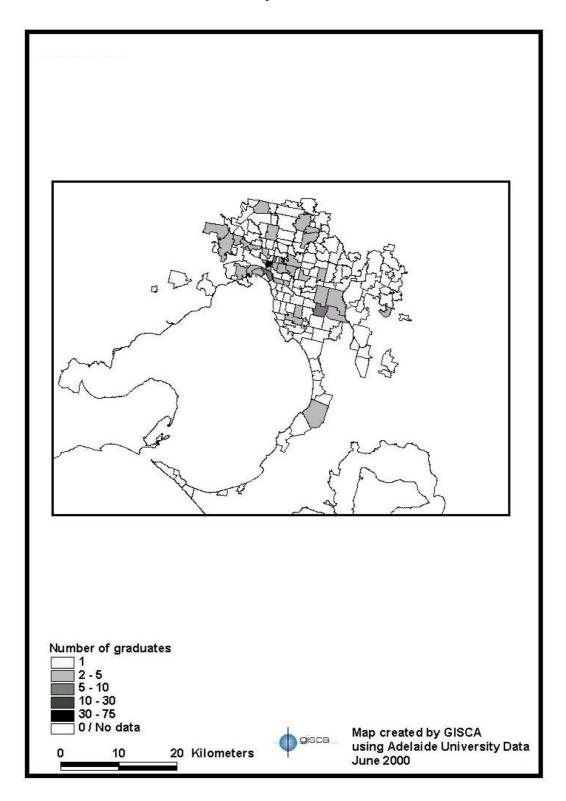


Figure 4.4: Brisbane Metropolitan Area, Number of South Australian University Graduates Who Gained Employment by Postcode, 1992-99 Graduates

Source: Graduate Destination Survey

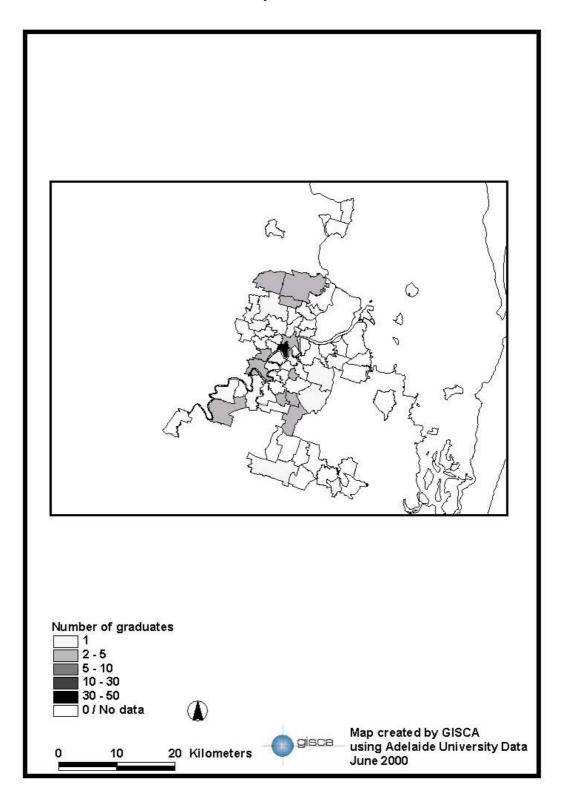


Table 4.3: Destinations of Interstate Migrants in the Self-Nominated Sample, 2000

Source: Bringing Them Back Home Survey

Destination	Number
New South Wales	36
Australian Capital Territory	22
Queensland	14
Victoria	13
Western Australia	9
Northern Territory	5
Tasmania	1
Total	100

A somewhat different pattern is evident among the alumni sample as is shown in Table 4.4. In this sample, Victoria accounts for a quarter of the alumni as does New South Wales. Again the ACT is an important destination of graduates from South Australia. They also are relatively mobile on arriving at their destination. At the time of the survey (July, 2000), 62.3 percent of respondents had not remained at their first interstate destination.

Table 4.4: Interstate Relocation, Alumni Respondent Group, 2000

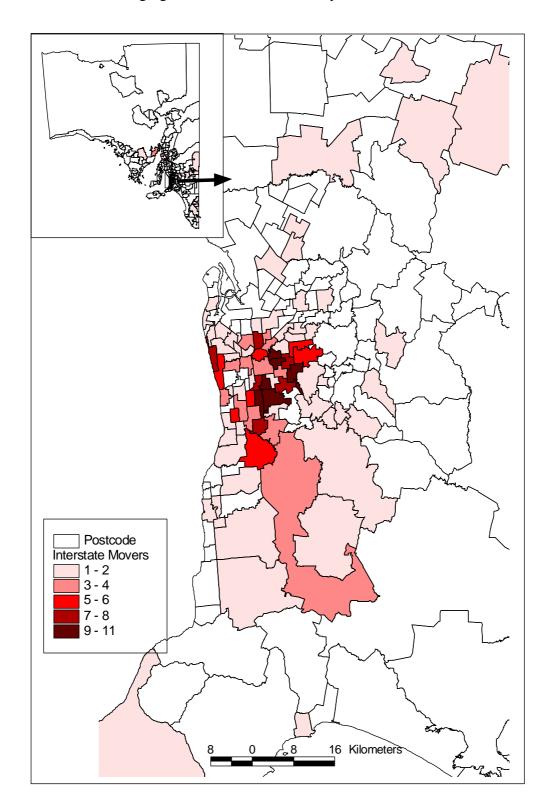
Source: Bringing Them Back Home Survey

State	Movers	Percent
Victoria	72	25.9
New South Wales	68	24.5
Queensland	30	10.8
Western Australia	26	9.3
Tasmania	12	4.3
Northern Territory	20	7.2
Australian Capital Territory	34	12.2
Overseas	16	5.8

Most (28.9 percent) had made only one move from their original interstate destination, while 19.5 percent had made two moves and 21.0 percent had made three moves. Nevertheless, approximately 13 percent had made more than five after their relocation interstate. A quarter of the alumni group reported a shift from the State they had originally relocated, especially to New South Wales (10 percent), Victoria (7 percent) and Queensland (5 percent).

Figure 4.5: Postcode of Interstate Movers, Alumni Respondent Group

Source: Bringing Them Back Home Survey



The Alumni Respondent Group was also asked to indicate their residential postcode just prior to their move interstate. The results are shown in Figure 4.5. The cluster of residential location is biased towards the eastern and Mitcham Hills area. However, this is also the source of many of the students attending Adelaide University (Hugo 1998).

4.4 QUALIFICATIONS OF OUTMIGRANTS FROM SOUTH AUSTRALIA

4.4.1 Introduction

It has already been established in Chapter Three that the net loss by interstate migration experienced by the State represents a 'brain drain'. It is proposed in this section to explore this factor more deeply using the data sets especially developed for the study.

Firstly, data provided by the alumni associations of South Australian universities are analysed. The University of South Australia and Flinders University Alumni Associations each provided comprehensive details for their members presently residing at an interstate address. These data included details of award and year of graduation. The University of South Australia data covered the period 1990 to 2000, and the Flinders University data were for the period 1994 to 2000. These data were expected to provide an indication of the extent to which graduates move from South Australia to interstate locations, together with the kind of skills, based on the discipline of their degree, they take with them. There are, however, some caveats which need to be made in assessing these data

- It is not possible to identify graduates whose usual residence was in another State, and who came to South Australia specifically to study, and returned to their home State on completion of their award.
- It is not possible to relate year of graduation to year of departure from South Australia.
- Some graduates may in fact have studied their award in the distance mode.

These restrictions notwithstanding, the data are instructive in terms of the kinds of skills which South Australian universities are providing and which are subsequently being utilised in another State.

4.4.2 University of South Australia alumni data

Not all records provided by the University of South Australia provided details on degree type. The University is currently about half way through a process of converting the course code details which had been previously used into a course name entry for award type. Where course name data were available, they were coded into the same field of study classification used by the Graduate Careers Council of Australia. Table 4.5 shows the top four fields of study, in terms of numbers of graduates, by States for the period 1990-2000. Details on graduates numbers by all fields of study are shown in Appendix C.

Table 4.5: University of South Australia Graduates by Field of Study and Current State, 1990 to 2000

Source: University of South Australia Alumni Association

Field of Study.	NSW	Vic	Qld	WA	Tas	NT	Total
Edn Post/Other	608	178	473	20	15	57	1351
Educn. Initial	118	58	44	19	10	58	307
Business Studies	66	40	23	7	4	2	142
Languages	40	43	20	1	0	8	112
Subtotal	832	319	560	47	29	125	1912
Others	166	135	74	59	32	53	518
Unspecified	893	617	360	161	78	339	2448
Total	1891	1071	994	268	138	517	4879

In comparison with other fields of study, graduates from postgraduate education awards represent the most significant skill which is potentially exported from South Australia. However, some part of this dimension may be due to the very successful distance learning postgraduate education program operated by the University of South Australia. Other than education graduates, there have also been significant numbers of business studies graduates who are now located at an interstate address. New South Wales and Queensland is the current location for the majority of education graduates. However, for business studies graduates, New South Wales and Victoria are the principal States. With the caveats mentioned earlier, these data suggest that interstate migration among university graduates in the ten years to 2000 is diluting the skills of the State in the areas of education training and business studies. Moreover, the eastern seaboard States have been the principal beneficiaries of this mobility.

Table 4.6: Fields of Studies with More Than 10 Graduates Locating in New South Wales, 1990-2000

Source: Graduate Careers Council of Australia

Field of Study	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Edn Post/Other	5	4	58	62	65	121	89	88	64	31	21	603
Educn. Initial		2	9	8	8	15	6	8	15	43	4	118
Business St		1	1		4	3	6	1		14	36	66
Languages	6	3	22	4	3				1		1	34
Soc.Sc.	1		6	1	3	3				3		16
Health, Other											13	13
Electronic/Computing Eng.	3	1		2	1	3	3			1	1	12
Other Eng.				1	1	1	1	1	3	1	3	12
Building				3	2	2	1		2	1		11
Humanities	3		1		2	2	2		1		3	11
Computer Sc.											10	10
Life Sc.	1			4		2		1	1	2		10

Postgraduate education graduates locating in New South Wales represented sizeable numbers from 1992, reaching a peak of 121 in 1995. Relatively high levels continued between 1996 and 1998, but have declined significantly in 1999 and 2000. An almost identical pattern has occurred with these graduates locating to Queensland, as shown in Table 4.6 and 4.7. Graduates with business studies qualifications locating to New South Wales and Victoria have been significant only in 1999 and 2000 (see Table 4.6 and Table 4.8) with New South Wales locations predominating over Victoria locations.

Table 4.7: Fields of Studies with More Than 10 Graduates Locating in Queensland, 1990-2000

Source: Graduate Careers Council of Australia

Field of Study	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Edn Post/Other	5	1	41	39	60	86	64	63	56	33	25	473
Educn. Initial	2	1	4	6	2	9	4	6	2	4	4	44
Business St			2	4	6	3	6				2	23
Languages	5	1	8	5					1			20
Vis/Perf Arts										5	7	12

Table 4.8: Fields of Studies with More Than 10 Graduates Locating in Victoria, 1990-2000

Source: Graduate Careers Council of Australia

Field of Study	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Edn Post/Other			9	24	14	34	24	24	32	10	7	178
Educn. Initial	1		8	5	1	5	4	11	4	9	10	58
Languages	11	2	16	14								43
Business St	1	1	1	6	2	1				11	17	40
Health, Other				2							22	24
Life Sc.			1	1		3	1	5	3	2	7	23
Humanities							3	1	1	1	9	15
Mech Eng.	2	2		2		1	1	1	2	1	2	14

Full details on graduates residing in Queensland, New South Wales and Victoria, and their field of study, have been presented in Appendix C.

4.4.3 Flinders University of South Australia Alumni

Data for Flinders University Alumni resident at interstate locations were provided for year of graduation and award. Comparable data were only available for the period 1994 to 1999. The award description was used to code graduates into the same field of study classification used by the Graduate Careers Council of Australia. Table 4.9 below shows the top five

fields of study, in terms of numbers of graduates by States for the period 1990-2000. Details on graduates numbers by all fields of study are shown in Appendix C.

Table 4.9: Flinders University of South Australia Graduates by Field of Study and Current State, 1994 to 1999

Source: Flinders University of South Australia Alumni Association

Field of Study	NSW	Vic	Qld	WA	Tas	NT	Total
Health, Other	64	58	68	8	24	38	260
Nursing, initial	55	52	57	7	4	23	198
Educn. Initial	53	28	21	4	4	11	121
Life Sc.	26	49	2	4	6	18	105
Business St.	30	43	8	3	3	16	103
Sub total	228	230	156	26	41	106	787
Unspecified	26	14	19	7	7	4	77
Total	360	344	210	39	53	130	1136

In contrast with the University of South Australia, health related awards predominate among Flinders graduates resident interstate. Of all Flinders Alumni who graduated between 1994 and 1999, and who presently live interstate, 40.3 percent held health related awards from the university. Further, more than three quarters (77.3 percent) of these graduates were located in Queensland, New South Wales and Victoria. Graduates with initial education qualifications, rather than postgraduate qualifications in the case of the University of South Australia alumni, were also significant. The only other field of study to generate more than 100 alumni living interstate were business studies awards. As was noted with the distribution of University of South Australia alumni, more of these graduates were locating in Victoria than in New South Wales. These results suggest that interstate migration among university graduates from Flinders University during the period 1994 to 1999 has been skills specific, especially among graduates with training in health, education and business studies. As was the case with University of South Australia graduates, the eastern seaboard States have been the principal beneficiaries of this mobility, with 78.0 percent of graduates from the top five fields of study now living in these States.

Figure 4.6 indicates that graduates with health qualifications (Nursing, initial; Nursing, post; and Health, other), and located in New South Wales peaked in 1996 and have trended downwards since then. Very similar patterns have prevailed in both Victoria and Queensland, as shown in the chart, except that the number graduates locating in Queensland in 1999 has increased.

Numbers of graduates with business studies qualifications are still relatively low in New South Wales and Victoria, although mobility of these skills to Victoria was greater than to New South Wales graduates (Tables 4.10, 4.11 and 4.12).

Figure 4.6: Graduates with Health Qualifications from Flinders University

Source: Flinders University of South Australia Alumni Association

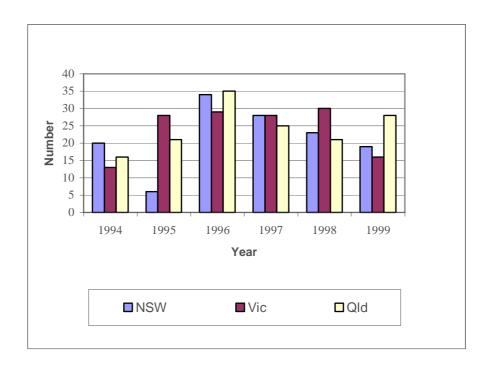


Table 4.10: Fields of Studies with More Than 10 Graduates Locating in New South Wales, 1994-99

Source: Flinders University of South Australia Alumni Association

Field of Study.	1994	1995	1996	1997	1998	1999	Total
Health, Other	7	6	16	11	14	10	64
Edn Post/Other	13	23	4	3		14	57
Nursing, initial	10		16	13	9	7	55
Educn. Initial			17	24	11	1	53
Business St	2		5	8	6	9	30
Life Sc.	6	1	4	4	4	7	26
Humanities	3		3	6	8	2	22
Nursing, post	3		2	4		2	11

Table 4.11: Fields of Studies with More Than 10 Graduates Locating in Queensland, 1994-99

Source: Flinders University of South Australia Alumni Association

Field of Study	1994	1995	1996	1997	1998	1999	Total
Health, Other	14	6	9	15	12	12	68
Nursing, Initial	2	10	22	6	9	8	57
Educn. Initial			9	3	3	6	21
Nursing, post		5	4	4		8	21

Table 4.12: Fields of Studies with More Than 10 Graduates Locating in Victoria, 1994-99

Source: Flinders University of South Australia Alumni Association

Field of Study	1994	1995	1996	1997	1998	1999	Total
Health, Other	5	15	11	12	14	1	58
Nursing, Initial	8	13	10	11	6	4	52
Life Sc.	4	2	14	12	9	8	49
Business St	3	4	10	4	17	5	43
Humanities	8	8	6	10	6	4	42
Nursing, post			8	5	10	11	34
Educn. Initial	1	7	1	1	12	6	28
Economics	1	2	3	2	4		12

Full details on graduates residing in Queensland, New South Wales and Victoria, and their field of study, have been presented in Appendix C.

4.5 SUMMARY

In this section two data sets have been employed. The first, provided by the Graduate Careers Council of Australia, provided data on South Australian Graduates who had obtained work at an interstate location by the April of the year following the completion of their award. This characteristic of the database is in fact one of its limitations, in that if a graduate of, say, 1998 obtained work in May 1999, but was unemployed during April, this would not be recorded. In this case, there has been a drain of talent from the State which has not been registered in the graduate destination survey. In some respects, this dilemma is overcome in using the databases of the university alumni associations. Nevertheless, there are some limitations associated with these data and theses have been described above.

Despite their limitation, the data on graduates from South Australian universities have demonstrated that there is a significant drain of talent from the State to interstate locations. The main training areas which contribute to the brain drain are education, health (especially

nursing) and business studies. The eastern seaboard States offer work to the large majority of these graduates. There has been a tendency for Queensland to employ large numbers of graduates with postgraduate education qualifications, health (especially nursing) graduates have been employed in almost equal numbers in Queensland, New South Wales and Victoria, while business studies graduates have tended to employed in greater numbers in Victoria than in New South Wales.

CHAPTER FIVE

CHARACTERISTICS OF SOUTH AUSTRALIANS MOVING INTERSTATE

5.1 INTRODUCTION

One of the most important universal features of migration is its selectivity. Migrants never are a representative cross-section of the population at either their origin or destination. Hence the impact of migration can be much greater than its overall numbers may seem to imply since the loss or gain of small numbers of people with strategically significant social or economic characteristics can have profound effects on the areas gaining or losing them. Chapter three has already indicated some of the characteristics of interstate migrants moving into and out of South Australia over the 1991-96 period using 1996 census internal migration data. In the present chapter we turn to the two surveys undertaken of South Australians interstate to further consider the characteristics of migrants.

5.2 AGE/SEX PROFILE OF PERSONS LEAVING SOUTH AUSTRALIA

Chapter three has already established the fact that the net migration out of South Australia is selective of young adults and in the present section we examine the age and gender profile of the groups selected for particular attention in this report. Table 5.1 shows that more than half of the graduates moving interstate in the 1990s were aged in their 20s. Nevertheless, there were substantial numbers of older graduates moving as well. As is the case with the census data analysed earlier, females outnumber males among the outmigrants. Hence the female brain drain is more substantial than that of males.

Females are contributing to the brain drain from South Australia at greater rates than males, and the most significant age group is the 20-24 year cohort. The dominance of this cohort has been identified in the analysis of migration based on 1996 census data, and from the analysis of responses from the questionnaire survey conducted exclusively for this report. It would suggest that the propensity to migrate among the young is almost a part of youth culture, and is probably a phenomenon which, at this time, cannot be modified in any significant way. It might further suggest, from a policy point of view, that steps need to be taken to ensure that when the goals of any move have been achieved by this group, that they can be encouraged to return to the State, and use the skills they have developed during their absence to work to the advantage of South Australia.

The age-sex composition of the self-nominated and alumni samples is shown in Table 5.2 and Table 5.3. This indicates that over three quarters were aged less than 30 at the time of movement and only a tenth were aged over 35.

This migration stream was predominantly masculine, with 61.7 percent of the self-nominated respondents respondents being male and 65.3 percent of the alumni respondents being male. However, this needs to be qualified in the sense that there may have been a tendency for a male head of household to complete the questionnaire. This result is in contrast to the findings from the Graduate Careers Council of Australia data (see Table 5.1).

Table 5.1: Age/Sex Profile of Graduates Obtaining Work Interstate, 1992, 1996 and 1999

Source: Graduate Careers Council of Australia

Year	Cohort		Numbers			Percent	
		Male	Female	Total	Male	Female	Total
1992	15-19	0	0	0	0.0	0.0	0.0
	20-24	89	113	202	16.1	20.4	36.5
	25-29	41	55	96	7.4	9.9	17.4
	30-34	34	24	58	6.1	4.3	10.5
	35-39	29	44	73	5.2	8.0	13.2
	40-49	29	76	105	5.2	13.7	19.0
	50+	7	12	19	1.3	2.2	3.4
	TOTAL	229	324	553	41.4	58.6	100.0
1996	15-19	0	1	1	0.0	0.2	0.2
	20-24	102	143	245	15.4	21.6	37.1
	25-29	50	70	120	7.6	10.6	18.2
	30-34	26	44	70	3.9	6.7	10.6
	30-39	22	48	70	3.3	7.3	10.6
	40-49	29	94	123	4.4	14.2	18.6
	50+	5	27	32	0.8	4.1	4.8
	TOTAL	234	427	661	35.4	64.6	100.0
1999	15-19	1	0	1	0.2	0.0	0.2
	20-24	91	160	251	13.7	24.1	37.7
	25-29	35	60	95	5.3	9.0	14.3
	30-34	30	39	69	4.5	5.9	10.4
	35-39	28	55	83	4.2	8.3	12.5
	40-49	42	89	131	6.3	13.4	19.7
	50+	12	23	35	1.8	3.5	5.3
	TOTAL	239	426	665	35.9	64.1	100.0

Table 5.2: Present Age/Sex Distribution of the Self-Nominated Sample, 2000

Age	Nu	mber	er Percent		Total		
	Male	Female	Male	Female	Number	Percent	
15-19	4	2	66.7	33.3	6	5.2	
20-24	24	18	57.1	42.9	42	36.5	
25-29	24	17	58.5	41.5	41	35.7	
30-34	11	2	84.6	15.4	13	11.3	
35-39	4	3	57.1	42.9	7	6.1	
40-44	3	2	60	40	5	4.3	
45-49	1		100	0	1	0.9	
50-54			0	0	0	0.0	
55-59			0	0	0	0.0	
60-64			0	0	0	0.0	
65+			0	0	0	0.0	
Total	71	44	61.7	38.3	115	100.0	

Table 5.3: Present Age/Sex Distribution of the Alumni Sample, 2000

Age	Nu	mber	ber Percent		Total		
	Male	Female	Male	Female	Number	Percent	
15-19	0	0	0	0	0	0.0	
20-24	49	33	59.8	40.2	82	29.9	
25-29	58	20	74.4	25.6	78	28.5	
30-34	24	12	66.7	33.3	36	13.1	
35-39	17	14	54.8	45.2	31	11.3	
40-44	12	4	75	25	16	5.8	
45-49	6	6	50	50	12	4.4	
50-54	11	4	73.3	26.7	15	5.5	
55-59	1	1	50	50	2	0.7	
60-64		1		100	1	0.4	
65+	1		100		1	0.4	
Total	179	95	65.3	34.7	274	100.0	

The self-nominated sample is considerably younger than the alumni sample but both have concentrations in the young adult ages of 20 to 29 years.

5.3 FAMILY AND HOUSEHOLD STATUS

The living arrangements of the samples before they left South Australia to move interstate and at the time of the survey, in July 2000, are presented in Table 5.4 and Table 5.5. The bulk of the migrants were singles or in couple relationships before leaving the State.

Table 5.4: Family Type When Left South Australia and at Time of Interview, Alumni Respondent Group

Source: Bringing Them Back Home survey

	In South	Australia	Inter	Interstate	
Family Type	Number	Percent	Number	Percent	
One person household	82	29.9	50	18.0	
Married or de facto couple	53	19.3	112	40.3	
Married or de facto couple with dependents	64	23.4	81	29.1	
Married or de facto couple with dependents & others	10	3.6	3	1.1	
Married or de facto couple with others	1	0.4	5	1.8	
One parent family with dependents	6	2.2	6	2.2	
Some other group of related persons	3	1.1	3	1.1	
Two or more unrelated people	27	9.9	17	6.1	
Other	28	10.2	1	0.4	
Total	274	100.0	278	100.0	

Table 5.5: Family Type When Left South Australia and at Time of Interview, Self-Nominated Sample

Source: Bringing Them Back Home survey

	In South	Australia	Inter	rstate
Family Type	Number	Percent	Number	Percent
One person household	23	20.2	16	14.0
Married or de facto couple	30	26.3	44	38.6
Married or de facto couple with dependents	18	15.8	24	21.1
Married or de facto couple with dependents & others	4	3.5	3	2.6
Married or de facto couple with others	1	0.9	3	2.6
One parent family with dependents	3	2.6	2	1.8
Some other group of related persons	8	7.0	4	3.5
Two or more unrelated people	13	11.4	18	15.8
Other	14	12.3	0	0.0
Total	114	100.0	114	100.0

Among the self-nominated sample, 20.2 percent lived by themselves before leaving, more than one quarter were married without dependents and 15.8 percent were married with dependents. A similar pattern prevailed among the alumni sample, except that the largest single group comprised those living alone (29.4 percent), and couples with dependents was a larger group than couples without children. Group households made up around a tenth of the migrants in both samples.

As would be expected, the family situation of the migrants at the time of departure from South Australia and the time of the survey in mid 2000 has undergone noticeable changes. The migration process has resulted in a reduction in the proportion of one person households, one parent households and households comprising a group of related people, and an increase in married or de facto households of most types. These results indicate that interstate migrants can form potentially lasting relationships after moving, which may have significant implications for the migrant's return to South Australia at some time in the future. In particular, a potentially lasting relationship formed interstate can represent a strong bond between the former South Australian resident and their adopted State. There is the possibility that this bond may cause that person to turn away forever from the prospect of returning to South Australia. Of course, much depends on with whom the South Australian origin migrant formed a partnership. If it were a fellow South Australian there is a greater likelihood of them being attracted back to the State than if the partnership were with someone coming from elsewhere.

5.4 EMPLOYMENT STATUS

The surveyed groups had a strong employment profile, as shown in Table 5.6. 50.9 percent were in full-time employment at the time of leaving SA, and for the alumni group the

proportion was higher at 58.5 percent. Therefore, for both groups there is every possibility that mobility was associated with opportunities to further their career. For those employed on a part-time or casual basis, the move interstate may have been motivated by the prospect of better employment opportunities, while among respondents who were unemployed at the time of moving, most were looking for work, and for this group the motivation for the move is clear. In each group there was a sizeable proportion of students, and only relatively small proportions who were not in the workforce.

Table 5.6: Employment Status at Time of Leaving South Australia, Alumni and Self-Nominated Respondents

Source: Bringing Them Back Home survey

Employment Status	Self-nominated		Alumni		Total	
	Number	Percent	Number	Percent	Number	Percent
Employed full-time	57	50.9	162	58.5	219	56.3
Employed part-time	1	0.9	11	4.0	12	3.1
Employed casual	16	14.3	18	6.5	34	8.7
Unemployed	5	4.5	13	4.7	18	4.6
Unemployed but looking for work	15	13.4	20	7.2	35	9.0
Not in workforce	2	1.8	9	3.2	11	2.8
Student	15	13.4	43	15.5	58	14.9
Not stated	1	0.9	1	0.4	2	0.5
Total	112	100.0	277	100.0	389	100.0

As will be shown later, employment related reasons drive the interstate mobility process in South Australia. Therefore, the creation of relevant job opportunities in South Australia is clearly an imperative if this aspect of the interstate mobility process is to be reduced.

Respondents were asked whether their current employment was the same as it had been at the time they left South Australia. For both the self-nominated group and the alumni group, 46 percent reported that their employment status had changed since leaving South Australia. For those who had experienced an employment status change as a result of mobility, respondents were asked to state their present employment status, and these results are presented in Table 5.7. Within both groups the main change in employment status has been a move into employment of some kind, particularly full time employment. Among the alumni respondents, there has been a movement into retirement.

Turning to the occupation of the two survey groups, more than half (54.5 percent) of the self-nominated group were professionals, as well as three quarters of the alumni group. The next most sizeable group was Intermediate, Clerical, Sales and Service Workers, comprising 20.8 percent of the self-nominated group and 9.4 percent of the alumni group. What is clear here is that there seems to be a propensity for migration among the more highly skilled segments of the occupation structure. In this analysis, 71.4 percent of employed movers in

the self-nominated group had occupations in Managers and Administrators, Professional and Technical and Associate Professional categories, the top three ABS classifications, while with the alumni group the proportion increased to 87.1 percent.

Table 5.7: How Has Employment Status Changed Since Leaving South Australia

Source: Bringing Them Back Home survey

	Self-nominated		Alumni		Total	
	Number	Percent	Number	Percent	Number	Percent
Now employed full time	50	79.4	88	53.7	138	60.8
Now employed part time	7	11.1	22	13.4	29	12.8
Now employed casually	2	3.2	9	5.5	11	4.8
Now not in the workforce		0.0	5	3.0	5	2.2
Now unemployed and looking for work	1	1.6		0.0	1	0.4
Now a student	3	4.8	8	4.9	11	4.8
Now retired		0.0	31	18.9	31	13.7
Now in own business		0.0	1	0.6	1	0.4
Total	63	100.0	164	100.0	227	100.0

Table 5.8: Occupation Structure of Self-Nominated and Alumni Groups

Source: Bringing Them Back Home survey

Occupation	Self-nominated		Alumni	
	Number	Percent	Number	Percent
Managers and Adminstrators	6	7.8	9	4.5
Professionals	42	54.5	153	75.7
Technicians and Associate Professionals	7	9.1	14	6.9
Intermediate Clerical, Sales and Service Workers	16	20.8	19	9.4
Tradespersons and Related Workers	4	5.2	1	0.5
Advanced Clerical and Service Workers	1	1.3	2	1.0
Intermediate Production and Transport Workers	1	1.3	0	0.0
Elementary Clerical. Sales and Service Workers	0	0.0	3	1.5
Labourer and Related Worker	0	0.0	1	0.5
Total	77	100.0	202	100.0

Further, the large majority of these movers were wage and salary earners -94.8 percent for the self-nominated group and 91.8 percent for the alumni group. The presence of small business owners, either working alone or employing others, was minimally represented in the migrant stream.

The salary level of these employed movers was skewed to the low end of the spectrum, for both groups, as shown in Table 5.9.

Table 5.9: Salary on Leaving South Australia

Source: Bringing Them Back Home survey

Salary	Self-no	minated	Alumni		
	Number	Number Percent		Percent	
Less than \$25,000	54	51.9	133	52.6	
\$25,000-30,000	13	12.5	21	8.3	
\$30,001-35,000	19	18.3	19	7.5	
\$35,001-40,000	7	6.7	20	7.9	
\$40,001-45,000	4	3.8	15	5.9	
\$45,001-50,000	1	1.0	9	3.6	
\$50,001-55,000	2	1.9	6	2.4	
\$55,001-60,000	3	2.9	5	2.0	
\$60,001-65,000	0	0.0	2	0.8	
More than \$65,000	1	1.0	23	9.1	
Total	104	100.0	253	100.0	

From a policy point of view, therefore, it would seem that there is scope in these results for the Government to be considering initiatives which might build professional industry in South Australia to provide more employment opportunities in these areas which would act as both a disincentive to move and an incentive to those presently located interstate to consider a return to South Australia, and which would offer the potential for higher salaries.

Turning to the occupations migrants moved into after leaving South Australia, the survey reported very high proportions with jobs in the top three ABS occupation categories of Managers and Administrators, Professionals and Technicians and Associate Professionals. For the self-nominated group, 83.6 percent moved into these types of jobs, while among the alumni group the proportion was 88.7 percent. These results can be compared with the occupational structure of migrants at their time of departure. For the self-nominated group, 71.4 percent of employed movers had occupations in Managers and Administrators, Professional and Technicians and Associate Professional categories and in the alumni group the proportion was 87.1 percent.

It is clear that the migration process has rewards for the movers. It suggests that there are pull factors operating at the destination, as well as push factors at the source, which are driving the migration process in South Australia. Each set of factors will need to be considered in the development of policies designed to reduce the extent of net out-migration from South Australia. The analysis of labour market characteristics in South Australia, and their comparisons with the eastern seaboard labour market, should provide considerable insights into what changes need to occur in South Australia to reduce the impact of 'push' factors and to lessen the lure of the 'pull' factors enticing South Australians to the eastern seaboard States, in particular.

Movers from South Australia were asked to indicate whether their current financial situation was worse, better or the same as that prevailing at the time they left the State. Within the self-nominated group, an overwhelming 81.4 percent said they were better off, 14.2 percent had become worse off, and 4.4 percent reported no change. The comparable response rates among the alumni group were 85.9 percent, 7.9 percent and 6.1 percent. This is further evidence of the financial rewards possible for people choosing to move away from South Australia. It also points to the way the South Australian Government will need to move if it wishes to influence the trends in interstate migration which have developed during the nineties.

Table 5.10: Salary of Migrants Before and After Migration

Source: Bringing Them Back Home survey

Salary range	Self-nominated					
	Before N	Before Migration		igration		
	Number	Percent	Number	Percent		
Less than \$25,000	54	51.9	5	4.5		
\$25,000-\$30,000	13	12.5	5	4.5		
\$30,001-\$35,000	19	18.3	7	6.3		
\$35,001-\$40,000	7	6.7	14	12.5		
\$40,001-\$45,000	4	3.8	13	11.6		
\$45,001-\$50,000	1	1.0	13	11.6		
\$50,001-\$55,000	2	1.9	11	9.8		
\$55,001-\$60,000	3	2.9	9	8.0		
\$60,001-\$65,000		0.0	8	7.1		
More than \$65,000	1	1.0	27	24.1		
Total	104	100.0	112	100.0		
Salary range	Alumni					

	Before N	/ligration	After m	igration		
	Number	Percent	Number	Percent		
Less than \$25,000	133	52.6	31	12.0		
\$25,000-\$30,000	21	8.3	11	4.3		
\$30,001-\$35,000	19	7.5	8	3.1		
\$35,001-\$40,000	20	7.9	12	4.7		
\$40,001-\$45,000	15	5.9	5	1.9		
\$45,001-\$50,000	9	3.6	17	6.6		
\$50,001-\$55,000	6	2.4	21	8.1		
\$55,001-\$60,000	5	2.0	20	7.8		
\$60,001-\$65,000	2	0.8	18	7.0		
More than \$65,000	23	9.1	115	44.6		
Total	253	100.0	258	100.0		

Further evidence that interstate migration has financial rewards for movers is provided in results relating to present income for former South Australians who have moved interstate. There has been a significant shift in the income structure of migrants, as shown in Table 5.10.

The large proportion of migrants with relatively low income at the time of migration is in line with both the young age profile of the movers coupled with the likelihood that many would be new graduates starting their career. Allowing for inflationary effects inherent in comparisons of current salaries with those received at various times in the past, the evidence strongly suggests that movers have increased their salaries through their decision not to remain in South Australia. The distribution of salaries has become more normal, in contrast to the negatively skewed salary distribution evident among movers at time of migration. Of more significance has been the huge growth in respondents with current salary greater than \$65,000.

5.5 HOUSING TENURE

Only 21.2 percent of the self-nominated group owned, or were purchasing, their own home at the time of leaving South Australia. On the other hand, 36.3 percent lived in rental accommodation, evenly spread between flats/units (16.8 percent) and houses (19.5 percent). More significantly, 38.9 percent of leavers lived in their parents' dwelling at the time of departure. At their interstate location, the proportion of these people living in houses increased to 57.9 percent, with 27.2 percent living in a flat/unit and 14.9 percent in an apartment. Moreover, the proportion buying their dwelling rose to 43.0 percent.

Of those who had owned prior to moving from South Australia, three quarters purchased their interstate accommodation. Among those non-owners who moved interstate, the tendency to buy a dwelling at their interstate location was considerably less. For example, 31.6 percent of former flat/unit renters moved into ownership, compared with 36.4 percent for persons who had lived in parents' dwelling and 40.9 percent for former house renters.

Over one third of the alumni group were purchasing or owned their home at the time they left South Australia (34 percent). A further 28 percent were renting a house or flat/unit. As was the case with the self-nominated group, a significant proportion was living with their parents (34 percent). At their interstate location, the proportion of these people living in houses increased to 78 percent, 16.3 percent living in a flat/unit and 5.4 percent in an apartment. Moreover, the proportion buying their dwelling rose to 70.3 percent.

Of those who had owned prior to moving from South Australia, three quarters purchased their interstate accommodation. Among those non-owners who moved interstate, the tendency to buy a dwelling at their interstate location was approximately two thirds, with 68 percent of former flat/unit renters and persons living with their parents moving into ownership. Consequently, a high proportion of the Alumni Respondent Group moved into housing ownership after moving interstate.

5.6 CONCLUSION

This chapter has confirmed the 'brain drain' nature of the interstate out migration from South Australia. The bulk of people leaving the State are in the young adult and highly educated age groups. They are drawn strongly from professional and managerial occupations, earning relatively high incomes and have high levels of home ownership.

CHAPTER SIX

FACTORS INFLUENCING OUTMIGRATION FROM THE STATE AND POSSIBLE RETURN MIGRATION

6.1 INTRODUCTION

The data presented on interstate migration influencing South Australia which has been presented so far has related to the numbers moving and some of their key demographic, social and economic characteristics before and after moving. While these data allow a degree of inference to be made regarding the drivers of their movement, it is also important to find out from the migrants themselves their perceptions of the factors which have influenced their movement. Accordingly, this chapter summarises the responses from the two surveys regarding, first of all, the forces which caused them to move. It then considers the extent to which these groups have considered returning to South Australia and the types of things which would influence such a move.

The chapter makes considerable use of the information collected in the two surveys. Of particular interest is the identification of the size of any group of former residents who might want to return to South Australia. Accordingly, the survey sought respondents' views on matters which related to a possible return to South Australia. Questions which sought details on these matters included ...

- Do you still call South Australia home?
- Do you plan to return to South Australia to live?
- If yes, what are the main reasons?
- If you plan to return to South Australia, when will it occur?
- If you plan to return to South Australia, what level of remuneration would you seek?
- What South Australian Government initiatives would you like to see introduced to encourage your return?

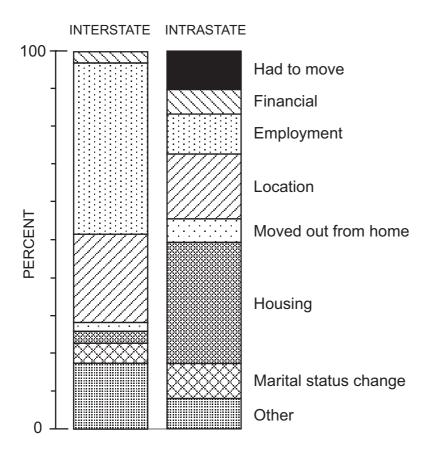
6.2 EXPLAINING INTERSTATE MIGRATION

While there has been an exhaustive analysis of patterns and composition of interstate migration in Australia, there has been much less analysis of the causes of movement. In fact, there is little data available relating to the motivations of people moving between the States, especially when compared with other similar countries like the United States.

The ABS collected information on causes of migration in a module on internal migration which was attached each year to the monthly labour force survey of two thirds of one percent of the working age population. This was discontinued after the 1987 survey but it is useful to look at the results of the survey since it collected information on reasons for movement. Figure 6.1 presents the results of the final survey and it will be noted that the reasons given for migration between States are quite different to those given for migration within States. Employment reasons accounted for almost half of interstate movements but only a tenth of those within States.

Figure 6.1: Persons Aged 15 Years and Over: Proportion of Persons who Changed Usual Residence by Reason for Moving and Type of Move, Year Ended 31 May 1987

Source: ABS 1988



However, it is apparent from the migration literature, especially that relating to the United States, that lifestyle elements are becoming increasingly significant in this movement.

6.3 CAUSES OF LEAVING SOUTH AUSTRALIA

Articulated reasons for migration provide useful insights into the migration process although they do suffer from a number of problems such as ...

- Memory lapse may result in the actual motivations at the time of leaving, being partially forgotten by the time of interview.
- There can be an element of post-hoc rationalisation in the reasons given.

Hence it must be realised that there are deeper underlying causes of migration which may not be fully reflected in the reasons that migrants give for moving.

Bearing the above in mind, Table 6.1 presents a summary of the reasons given by the respondents to the two surveys for leaving South Australia. Some very clear trends are in evidence. Overwhelmingly, the motivations are economic and strongly employment related.

Both the unavailability of suitable employment in South Australia and the desire for promotion, higher salaries etc. feature prominently among the reasons given. Lifestyle elements are not of major significance in the moves. It is clearly economic factors which overwhelmingly are fuelling the migration of young people out of the State.

Table 6.1: Reasons for Leaving South Australia

Source: Bringing Them Back Home surveys

Reason	Alu	Self-Nominated		
	Number	Percent	Number	Percent
Employment available in occupation of choice	45	14.0	159	19.1
For higher salary	31	9.7	36	4.3
No employment available in South Australia	30	9.3	77	9.2
To seek work	29	9.0	38	4.6
For higher non-salary benefits	29	9.0	71	8.5
For promotion/career/advancement	25	7.8	11	1.3
Marriage/partnership	25	7.8	112	13.4
Interstate transfer	15	4.7	40	4.8
To establish, relocate or expand business	14	4.4	19	2.3
Lifestyle	14	4.4	42	5.0
Promotion in current job	10	3.1	29	3.5
Education	9	2.8	16	1.9
Climate	9	2.8	27	3.2
Environment	8	2.5	57	6.8
Separation/divorce	7	2.2	19	2.3
Due to retrenchment, redundancy	6	1.9	8	1.0
Partner's employment	6	1.9	3	0.4
For more hours of work	5	1.6	20	2.4
Buy own home	4	1.2	21	2.5
Nearness to family/friends	0	0.0	8	1.0
Better (larger or smaller) dwelling	0	0.0	6	0.7
Lower housing costs	0	0.0	3	0.4
Lower cost of living	0	0.0	3	0.4
Retirement	0	0.0	2	0.2
Health	0	0.0	7	0.8
Total	321	100.0	834	100.0

Note: The total number of responses does not represent the number of respondents because interviewees were permitted to identify as many reasons for moving as were relevant to their particular move.

6.4 DEGREE OF ATTACHMENT TO SOUTH AUSTRALIA

An important element to consider in discussion of attracting migrants home is the extent to which the interstate migrants remain attached to South Australia. Accordingly, respondents to the surveys were asked if they 'still called South Australia home'. Among the self-nominated group, some 84.7 percent of respondents still called South Australia home. In

this finding there is the possibility that if the economic climate in South Australia could be turned around through successful Government policies and initiatives, then there could be a corresponding turnaround in the direction of net interstate migration between South Australia and the other Australian States. Indeed, there is a strong possibility that substantial numbers of people who have left the State would return if employment opportunities, in particular, were to be improved.

Among the alumni sample there was, as one would expect, a smaller proportion who still consider South Australia home. Nevertheless, some 49 percent indicated that they still felt the State was their home.

6.5 WILLINGNESS TO RETURN TO SOUTH AUSTRALIA

Of fundamental significance to any proposal to encourage former residents to return to the State is their willingness to return. Accordingly, respondents to the two surveys were asked about their willingness to return. Table 6.2 presents the findings and as was the case in the previous section there is a contrast between the responses of the self-nominated and alumni samples. As would be expected, the self-nominated sample has a high proportion (60.5 percent), indicating that they would definitely like to 'return home' and a smaller proportion (12.3 percent) indicating they do not intend to return to the State. For the alumni a quite different picture is evident, with only 14.7 percent indicating that they definitely had a willingness to return but 59.1 percent indicated they definitely did not have intentions to return.

Table 6.2: Willingness to Return Among Former South Australian Residents

Source: Bringing Them Back Home surveys

Response	Self-No	minated	Alu	mni
	Number	Percent	Number	Percent
Yes	69	60.5	47	14.7
No	14	12.3	189	59.1
Undecided	31	27.2	84	26.3
Total	114	100.0	320	100.0

It is useful to examine the characteristics of those in the sample who have indicated that they are willing to return to South Australia. It is clear from Table 6.3 that more than 40 percent of the self-nominated group who want to return to South Australia are in the 20-29 years age group, along with a further 28 percent aged 30-34 years. Therefore, this group is predominantly youthful. In contrast, slightly less than one third of the alumni group are aged 20-29 years, and 22 percent are aged in their thirties. The real difference between the two groups is that about one third of the alumni group who wish to return to South Australia is aged 50-59 years.

Table 6.3: Age of Respondents by Intention to Return to South Australia

Source: Bringing Them Back Home survey

		Self-Nominated						
Age	Y	Yes		No		Undecided		
	Number	Percent	Number	Percent	Number	Percent		
20-24	8	11.8		0.0	4	12.9		
25-29	20	29.4	4	28.6	4	12.9		
30-34	19	27.9	6	42.9	10	32.3		
35-39	7	10.3	2	14.3	5	16.1		
40-44	12	17.6		0.0	4	12.9		
45-49		0.0		0.0	3	9.7		
50-54	2	2.9		0.0	1	3.2		
55-59		0.0		0.0		0.0		
60-64		0.0	1	7.1		0.0		
65+		0.0	1	7.1		0.0		
Total	68	100.0	14	100.0	31	100.0		

			Alu	mni		
Age	Yes		No		Undecided	
	Number	Percent	Number	Percent	Number	Percent
20-24	4	10.8	3	1.8	4	5.6
25-29	8	21.6	9	5.5	12	16.9
30-34	4	10.8	17	10.4	10	14.1
35-39	4	10.8	16	9.8	9	12.7
40-44	3	8.1	21	12.8	13	18.3
45-49	2	5.4	26	15.9	10	14.1
50-54	5	13.5	15	9.1	6	8.5
55-59	7	18.9	17	10.4	5	7.0
60-64		0.0	12	7.3	1	1.4
65+		0.0	28	17.1	1	1.4
Total	37	100.0	164	100.0	71	100.0

It will be noticed from Table 6.3 that ...

- In all but the oldest cohorts, the overwhelming intention is to return to South Australia.
- The largest significant undecided groups are in the youngest cohorts.

From a South Australian perspective, there is an inherent danger in the latter point. The probability exists that the respondents may decide to remain interstate. In contrast, the first point indicates that the Government can attract a large proportion of young migrants back to South Australia. In both cases, however, it is an imperative that policies are put in place which will nurture the intention to return. Moreover, as Table 6.6 shows, the current salary

levels of people intending to return are skewed towards the \$50,000 and higher levels, especially for the alumni group. This is further evidence of the kind of economic and job environment which needs to be developed in the State to foster an increased return stream and turnaround the States net out-migration levels. Any job creation program designed to encourage a decision to return to the State will need to have associated salary levels capable of matching relatively high current and expected salary levels.

Table 6.4: Intention to Return by Sex

Source: Bringing Them Back Home survey

Sample Group/Sex	Yes	No	Undecided
Self-nominated			
Male	44	7	20
Female	25	7	11
Alumni			
Male	23	116	40
Female	15	49	31

In Table 6.4, it is clear that females entertain a return to South Australia less enthusiastically than males. Among males in the self-nominated group, 62 percent would return, 28.2 percent were undecided and 9.9 percent would not return. With females, the respective proportions were 58.1 percent, 25.2 percent and 16.3 percent. In the alumni group, 12.8 percent of males would return, 64.8 percent would not return and 22.3 percent were undecided. Among females in this group, the respective proportions were 15.8 percent, 51.6 percent and 32.6 percent. In this respect, the evidence would suggest that any policy pitch may need to be developed on two levels – one aimed at the entire target audience, and within this delivery an underlying message directed at women within the target group.

Table 6.5 shows how the decision to return to South Australia is distributed among the occupation structure of people who have left South Australia. Row data in this table shows that within most occupation groups there is an overwhelming intention to return. More significantly is the fact that an intention to return exists within the professional group of both the self-nominated and the alumni sample. It is for these occupations, therefore, that the Government should be developing policies to encourage their return.

Table 6.6 shows that the intention to return is most evident among migrants whose current incomes are less than \$55,000, although slightly less so among the alumni group of respondents. Among high income earners there is both a higher level of indecision, and a tendency to not return to South Australia as current salary level increases. These data may suggest that high costs of living at eastern seaboard locations may have a substantial impact on incomes up to \$55,000 per annum. If this is so, then the South Australian Government needs to highlight among this group the lower costs of living in this State, together with a range of other amenity attributes, which can actually be discounted against possibly lower salary levels which might be available to migrants if they return to South Australia.

Table 6.5: Current Occupation of Persons Expecting to Return to South Australia

Source: Bringing Them Back Home survey

	Self-Nominated						
Occupation	Yes		No		Undecided		
	Number	Percent	Number	Percent	Number	Percent	
Manager and Administrator	1	1.5	2	14.3	2	6.7	
Professionals	44	67.7	7	50.0	18	60.0	
Technicians and Associate Professionals	10	15.4	3	21.4	4	13.3	
Tradespersons and Related Workers	3	4.6		0.0	2	6.7	
Advanced Clerical and Service Workers	1	1.5		0.0	2	6.7	
Intermediate Clerical, Sales and Service Workers	5	7.7	1	7.1	2	6.7	
Elementary Clerical, Sales and Service Workers	1	1.5	1	7.1		0.0	
Labourers and Related Workers		0.0		0.0		0.0	
Total	65	100.0	14	100.0	30	100.0	

	Alumni						
Occupation	Y	es	N	Го	Unde	cided	
	Number	Percent	Number	Percent	Number	Percent	
Manager and Administrator	3	7.9	12	9.7	1	1.5	
Professionals	28	73.7	90	72.6	55	80.9	
Technicians and Associate Professionals	1	2.6	8	6.5	6	8.8	
Tradespersons and Related Workers	1	2.6	5	4.0	1	1.5	
Advanced Clerical and Service Workers	3	7.9	2	1.6	1	1.5	
Intermediate Clerical, Sales and Service Workers	1	2.6	6	4.8	4	5.9	
Elementary Clerical, Sales and Service Workers		0.0	1	0.8		0.0	
Labourers and Related Workers	1	2.6		0.0		0.0	
Total	38	100.0	124	100.0	68	100.0	

Table 6.7 shows, for those who expect to return to South Australia, the occupation category to which they would want to return. The very high proportion of professionals in each category is very informing. These dominate in the group who have left the State, and their return can clearly be encouraged by indicating to this group that changes to the labour market situation in South Australia are being made which will create an environment which promotes the possibility of their return.

Table 6.6: Current Income Levels of Persons Expecting to Return to South Australia

Source: Bringing Them Back Home survey

			Self-No	minated			
Income	Y	Yes		No		Undecided	
	Number	Percent	Number	Percent	Number	Percent	
Less than \$25,000	5	7.5		0.0		0.0	
\$25,000-\$30,000	3	4.5	1	7.1	1	3.2	
\$30,001-\$35,000	4	6.0	1	7.1	2	6.5	
\$35,001-\$40,000	10	14.9		0.0	4	12.9	
\$40,001-\$45,000	9	13.4	1	7.1	3	9.7	
\$45,001-\$50,000	8	11.9	2	14.3	3	9.7	
\$50,001-\$55,000	8	11.9		0.0	3	9.7	
\$55,001-\$60,000	4	6.0	1	7.1	4	12.9	
\$60,001-\$65,000	4	6.0	1	7.1	3	9.7	
More than \$65,000	12	17.9	7	50.0	8	25.8	
Total	67	100.0	14	100.0	31	100.0	

			Alu	mni		
Income	Y	es	N	Го	Unde	cided
	Number	Percent	Number	Percent	Number	Percent
Less than \$25,000	2	5.3	22	14.5	7	10.3
\$25,000-\$30,000		0.0	7	4.6	4	5.9
\$30,001-\$35,000	2	5.3	4	2.6	2	2.9
\$35,001-\$40,000	3	7.9	8	5.3	1	1.5
\$40,001-\$45,000	2	5.3	3	2.0		0.0
\$45,001-\$50,000	4	10.5	7	4.6	6	8.8
\$50,001-\$55,000	5	13.2	11	7.2	5	7.4
\$55,001-\$60,000	5	13.2	10	6.6	5	7.4
\$60,001-\$65,000	4	10.5	7	4.6	7	10.3
More than \$65,000	11	28.9	73	48.0	31	45.6
Total	38	100.0	152	100.0	68	100.0

Table 6.7: Expected Occupation of Those Expecting to Return to South Australia

Source: Bringing Them Back Home survey

Occupation	Self-No	Self-Nominated		Alumni		
	Number	Percent	Number	Percent		
Professionals	64	72.7	66	82.5		
Technicians and Associate Professionals	8	9.1	4	5.0		
Intermediate, Clerical, Sales and Service Workers	6	6.8	4	5.0		
Tradespersons and Related Workers	5	5.7	0	0.0		
Managers and Administrators	3	3.4	6	7.5		
Intermediate Production and Transport Workers	1	1.1	0	0.0		
Elementary Clerical, Sales and Service Workers	1	1.1	0	0.0		
Total	88	100.0	80	100.0		

Table 6.8, which indicates the level of salary expected by those who plan to return, points to the nature of policy decisions which are needed in the State to work to turnaround the present net out-migration from South Australia.

Table 6.8: Expected Remuneration Level of Those Expected to Return to South Australia

Source: Bringing Them Back Home survey

Remuneration	Self-No	Self-Nominated		mni
	Number	Percent	Number	Percent
Less than \$25,000		0.0	7	5.3
\$25,000-30,000	2	2.1	1	0.8
\$30,001-35,000	2	2.1	1	0.8
\$35,001-40,000	12	12.8	9	6.8
\$40,001-45,000	17	18.1	8	6.0
\$45,001-50,000	10	10.6	14	10.5
\$50,001-55,000	13	13.8	10	7.5
\$55,001-60,000	7	7.4	10	7.5
\$60,001-65,000	7	7.4	4	3.0
More than \$65,000	24	25.5	69	51.9
Total	94	100.0	133	100.0

In the case of those who intend to return, more than 50 percent in each group expect to obtain jobs with remuneration greater than \$50,000.

6.6 REASONS WHY MIGRANTS WOULD RETURN TO SOUTH AUSTRALIA

Respondents who indicated that they would, in all likelihood, return to South Australia were also asked to identify those factors which attracted them back to the State. The range and magnitude of reasons are provided in Table 6.9. This reinforces the powerful role of family and friends in influencing the return migration process. It also shows the significance of factors South Australians are proud of - lifestyle, environment, climate and most significantly, house and land prices and relatively low costs of living. These are factors that the South Australian Government need to promote. These are the factors which cause expatriate South Australians to still call South Australia home. They are the factors which could work to attract more interstate residents to South Australia in the future. But, for this to happen, changes must occur within the South Australian job opportunity environment. The importance of this development can be judged by the reasons given for those people who do not plan to return to South Australia. These are presented in Table 6.10 and the results demonstrate the compelling attractions of interstate employment opportunities.

Table 6.9: Reasons for Wanting to Return to South Australia

Source: Bringing Them Back Home survey

Reason	Self-No	minated	Alumni			
	Number	Percent	Number	Percent		
Family in SA	86	17.9	91	17.1		
Friends in SA	67	13.9	72	13.5		
Lifestyle	60	12.5	68	12.8		
Environment	53	11.0	49	9.2		
House and land prices	50	10.4	56	10.5		
Climate	47	9.8	40	7.5		
Lower cost of living	46	9.6	52	9.8		
New job	12	2.5	14	2.6		
To seek work	11	2.3	8	1.5		
Education	9	1.9	8	1.5		
To establish, relocate or expand business	8	1.7	3	0.6		
Job transfer	6	1.2	6	1.1		
Higher salary	5	1.0	8	1.5		
Non-salary issues	5	1.0	13	2.4		
Partner's employment	5	1.0	9	1.7		
Promotion	4	0.8	7	1.3		
Marriage/partnership	4	0.8	3	0.6		
Retirement, health	2	0.4	22	4.1		
Separation/divorce	1	0.2	0	0.0		
Retrenchment, redundancy	0	0.0	3	0.6		
Total	481	100.0	532	100.0		

Table 6.10: Reasons for Not Returning to South Australia

Source: Bringing Them Back Home survey

Reason	Self-No	minated	Alu	mni
	Number	Percent	Number	Percent
Employment opportunities better interstate	46	17.1	146	12.9
Promotion opportunities better interstate	31	11.5	81	7.1
Salary levels are as good as in SA	27	10.0	82	7.2
Higher salary where I am now	22	8.2	89	7.8
Lifestyle	22	8.2	119	10.5
Business opportunities better interstate	21	7.8	59	5.2
Cost of relocating back to SA	21	7.8	23	2.0
Partner is employed here	19	7.1	72	6.3
Established in current location	13	4.8	121	10.7
I am near to family/friends interstate	11	4.1	67	5.9
Marriage/partnership keeps me interstate	10	3.7	69	6.1
Environment	10	3.7	75	6.6
Climate	7	2.6	76	6.7
Education	4	1.5	19	1.7
Better housing here than in SA	4	1.5	9	0.8
Plan to retire in present location	1	0.4	27	2.4
Separation/divorce keeps me interstate	0	0.4	2	0.2
Total	269	100.0	1136	100.0

The interstate location offers economic and employment opportunities which cannot be accessed in South Australia. These results clearly show the course of action which the State Government needs to take. The challenge is to offer these people something approaching the kinds of opportunities that exist along the eastern seaboard. If this occurs, then two results will occur. There will be a greater propensity for expatriates to return to South Australia, South Australia will become attractive to increasing numbers of interstate residents, and the propensity for resident South Australians to migrate to other States may diminish.

However, given the developing characteristics of the global economy, it is inconceivable that South Australia should achieve the same kind of employment market as that existing in Sydney and Melbourne. Successful job creation policies developed in the future will create a jobs environment somewhere between the current environment and the Sydney/Melbourne ideal. In this context, the State should expect a form of interstate migration to develop which is characterised by relatively high levels of youth leaving the State, but which is counterbalanced by higher levels of older people, aged in the 30 plus cohorts, who will be encouraged to return by the improved economic conditions and the impact these have on job creation and who are at a stage of life where social and environmental amenity are accorded a higher priority than type of job and income earning capacity. In this scenario, these people will rank lifestyle and opportunities for children possibly more highly than the economic advantages that accrue at an eastern seaboard location.

6.7 INCOME EXPECTATIONS OF RETURNING MIGRANTS

The picture presented in the previous sections is one where the pressures influencing people leaving the State are economic, while those pulling them back to the State are largely family and lifestyle related.

Table 6.11: Current Salary Compared with Expected Salary for Those Expecting to Return to South Australia

Source: Bringing Them Back Home Survey

Salary Range		Self-No	minated			Alu	ımni	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$25,000	5	7.7		0.0	2	5.9	4	11.8
\$25,000-30,000	2	3.1	2	3.1		0.0	1	2.9
\$30,001-35,000	4	6.2		0.0	2	5.9		0.0
\$35,001-40,000	10	15.4	10	15.4	3	8.8	4	11.8
\$40,001-45,000	9	13.8	14	21.5	2	5.9	2	5.9
\$45,001-50,000	8	12.3	8	12.3	3	8.8	7	20.6
\$50,001-55,000	7	10.8	10	15.4	3	8.8		0.0
\$55,001-60,000	4	6.2	4	6.2	5	14.7	4	11.8
\$60,001-65,000	4	6.2	5	7.7	4	11.8	1	2.9
More than \$65,000	12	18.5	12	18.5	10	29.4	11	32.4
Total	65	100.0	65	100.0	34	100.0	34	100.0

The latter, notwithstanding, it is clear that potential returnees are not willing to give up their current income levels to return to the State. For example, Table 6.11 shows that among both sample groups, respondents will generally expect to earn more, or at least the same, if they are to return to South Australia. Therefore, there is no scope for the Government to believe that lifestyle characteristics will work alone to encourage expatriates back to the State. There will need to be a conscious and successful program developed which results in a real advancement of the economic climate in South Australia, which is measured by significant job creation progress, particularly in the higher levels of the occupational structure.

Among the self-nominated group, only 20 percent stated that they would return to a lesser salary level. In contrast, 30.8 percent would return to the same level, but 49.2 percent would expect to be earning a higher income on their return than their present level. Within the alumni sample, more than half of the persons who responded to the question regarding income expectation upon return to South Australia, expected income greater than \$65,000. This reinforced the finding of the present income data where 44 percent of respondents earn greater than \$65,000. Due to the higher incomes interstate, the expectation of the alumni group is that their present incomes would be matched or increased upon returning to South Australia.

6.8 SUMMARY

This section has presented the results of a survey of persons who are presently residents of other States of Australia, but who are also genuinely interested in returning to South Australia if the opportunity presents itself. Their evidence has been used to provide insights into the motivation to move from South Australia, the characteristics of movers at the time of mobility and changes which occur in some of these characteristics at their destination. Many of the findings have been examined in terms of their impact on the possibility of a return to South Australia. The clear finding is that significant proportions of these movers would return to South Australia if there was evidence of appropriate changes occurring within the economic framework of the State. These people will not return to the State if it means that they are disadvantaged, especially in terms of income and job opportunities. This is notwithstanding that they recognise the enormous advantages that South Australia possesses in relation to environment, lifestyle and costs of living. Nevertheless, at the end of the day any move back to South Australia has to be shown to be worthwhile for the movers. There are a number of ways in which the 'worthwhileness' of a return to the State could be demonstrated, and these will be examined elsewhere in this report. The target group for such exercises is clearly the older age groups, which this analysis has shown to be ripe for a return. The results fit in with findings elsewhere in the report which suggest that part of the culture of youth is an urge to move away from the State of birth, for whatever experience the venture will bring. It seems that it is folly to try to implement policies which seek to restrict this urge to move and discover. Better to concentrate effort and resources on the older group which has fulfilled its youthful urges and are now ready to enter a new stage of the life, where priorities associated with child rearing, education and lifestyle are more predominant. In this respect South Australia has much to offer. Moreover, these are areas which could be built upon to further increase the State's attractiveness, particularly in the area of education, childcare and urban amenity.

CHAPTER SEVEN

THE SOUTH AUSTRALIAN LABOUR MARKET AND ITS INFLUENCE ON INTERSTATE MIGRATION¹¹

7.1 INTRODUCTION

This chapter outlines some of the linkages between recent economic and labour market trends and population levels in South Australia. The chapter aims to highlight some of the key economic and employment related drivers of population change recognising that the migration of people to other regions in search of employment is a feature common to most societies throughout the world. This process can bring benefits to individuals and nations but it can also diminish the vitality and potential of a region if it continues to lose more skilled and experienced people than it gains. The available evidence indicates that South Australia is experiencing such a problem. One of the great social and economic challenges for South Australia is to begin to reverse this trend. Meeting this challenge will require an understanding of the dynamics driving interstate migration trends. It will also require the development of sophisticated strategic responses grounded in such an understanding.

The availability of sufficient, secure, rewarding and well paid employment has a significant influence upon population levels. Issues such as employment security, access to accredited training, career path opportunities, rates of pay and working conditions are among the key drivers of decisions about where people live and work. If working conditions or employment prospects deteriorate in one region relative to other regions there is an increased chance that people will leave in search of suitable employment.

There is considerable evidence that the South Australian labour market has deteriorated relative to other mainland states over the last ten years and that this is likely to be fuelling population outflow. Among the key indicators of this in South Australia are ...

- Employment growth has been relatively slow and full-time employment opportunities have declined sharply over the ten years to 2000.
- Most of the growth in employment has been part-time and has disproportionately benefited males.
- Employment growth is concentrated in relatively low wage industry sectors.
- Unemployment has ratcheted upward over the last ten years and remains high relative to the nation and most other mainland states.
- Average weekly earnings are deteriorating relative to the nation.
- Skilled employment vacancies are lower relative to the eastern states.

South Australians are likely to be attracted to other states because there are relatively more full-time jobs and skilled employment vacancies available. Employment can often be more attractive interstate because higher salaries, benefits and career paths are available.

Acting to offset some of the forces driving migration from South Australia are important demographic changes taking place in the South Australian workforce. Like the population

The bulk of this chapter was prepared by Dr. John Spoehr, Executive Director of the Centre for Labour Studies at Adelaide University. He acknowledges the assistance of Lou Wilson and Luke Oswald who helped in the preparation of the data.

as a whole the South Australian workforce is ageing. This is particularly so in a range of skilled occupations. The ageing of the South Australian workforce is likely to be a key source of demand for employment over the next five to ten years. If employers replace retiring employees a large proportion of this employment is likely to be full-time and relatively well paid managerial, professional and trades related positions. The availability of a greater number of relatively high paid skilled positions would make South Australia a much more attractive place to live.

7.2 ECONOMIC TRENDS AND PROSPECTS

There has been steady improvement in a number of key economic indicators in South Australia over the two years to early 2000. This includes a 7 percent increase in State Final Demand, a 2.3 percent increase in employment and sharp growth in dwelling construction over the twelve months to March 2000. In addition South Australia has experienced strong export growth increasing by around 25 percent over the twelve months to April 2000. These favourable trends are eclipsed by longer run economic and labour market trends indicating that South Australia is under-performing relative to the nation. There is also evidence that this gap in performance is widening and that it is has been a cause of significant losses of South Australians to other parts of Australia during the 1990s.

Over the ten years to 1997 overall economic growth averaged 2.6 percent in South Australia compared with 3.3 percent for Australia (Gelber and Jones, 1999). During this same period South Australia under-performed Australia in 13 out of 18 Australian and New Zealand Standard Industry Classification (ANZIC) industry sectors. Where output growth was been above the national average it was concentrated in sectors with very low or negative employment growth. This includes manufacturing, electricity, gas and water, transport and storage and communications. Put simply output growth in South Australia has been stronger in industries which require fewer employees (Gelber and Jones, 1999:39). This trend has underpinned slow employment growth and the loss of significant numbers of full-time jobs in key industries in South Australia.

Employment growth in South Australia over the ten years to 1997 was around 0.8 percent which is less than half the Australian average of 1.8 percent (Gelber and Jones, 1999:42). While the rate of employment growth picked up at the end of the 1990s it will not be strong enough or sustained long enough to enable significant inroads to be made into unemployment.

After a difficult period of economic adjustment following the collapse of the State Bank of South Australia state debt as a percentage of Gross State Product (GSP) has declined significantly from 28 percent to around 19 percent in 1999. The non-commercial sector deficit has been eliminated (State Budget Papers, 1998-99). This relatively robust financial position is a basis upon which to confidently embark on a higher growth strategy. The key problem facing South Australia appears no longer to be excessive debt but rather too little public and private sector investment.

According to the National Institute of Economic and Industry Research (NIEIR) GSP growth is forecast to be 3.0 percent for 1999-2000, declining from stronger growth of 4.0 percent experienced over 1998-99. This growth has been supported by strong household

consumption spending flowing from a regime of low interest rates, low inflation, consumer credit growth, employment growth and growth in dwelling construction.

GSP growth is expected to slow considerably in 2000-01 due to declining business investment and private housing expenditure. The investment flowing from large scale development projects such as those at WMC Olympic Dam and the Adelaide Hills Tunnel have ended and there are few new large scale projects on the horizon. It is also expected that household consumption expenditure will slow considerably as high household debt levels come under pressure from rising interest rates.

Slower GSP growth is expected over the 2000–002 period due declining investment and consumption levels and the end of the construction cycle leading to a decline in housing expenditure.

Deteriorating international economic conditions are forecast for the 2000-01 period indicating that South Australia can expect slower GSP and employment growth over the next two years. Relief from the downturn is likely to be experienced in 2002-03 with GSP growth picking up on the back of higher rates of business investment. Growth is forecast to average 2.2 percent in South Australia over the 1999–2005 period.

The subdued short-term economic outlook forecast by NIEIR and BIS Schrapnel (Gelber and Jones, 1999) will make it more difficult to attract migrants to South Australia. In this context the role of Government investment in growth generating strategies will be in sharp focus. The challenge for the South Australian Government is to help build a more robust and secure labour market that is capable of underpinning the growth of high skill, high wage employment in industries which are sustainable. The social and economic benefits of such an approach are likely to be very significant, laying the foundations for future prosperity and well-being for South Australians.

7.3 LABOUR MARKET TRENDS

7.3.1 Participation rates

The labour force participation rate for South Australian males and females has remained below national rates for the past twenty years ¹². Figures 7.1 and 7.2 indicate a significant divergence between the South Australian and the Australian rate. In the early 1980s there was a relatively small gap between South Australian and Australian participation rates. This gap widened considerably over the 1990s largely due to a growing divergence between the Australian and South Australian female participation rates. As a consequence the strong growth in female labour force participation in South Australia over the sixteen years to 1996 has been significantly eroded over the four years to 2000. Female participation rates in South Australia went against the rising national trend after converging with the national rate of around 63 percent in June 1996. At the beginning of the 1990s the Australian female participation rate was 1.5 percentage points higher than the South Australian rate of 50.9 percent. By June 2000 it was 3.5 percentage points higher than the South Australian rate of 51.5 percent. Clearly many women have been discouraged from participation in the South

Labour force participation rates are for any group, the labour force expressed as a percentage of the civilian population aged 15 and over for the same group.

Australian labour market. This is due in part to the intensification of competition for jobs created by a larger pool of men competing for jobs in service industries where women have historically secured employment.

Table 7.1: Participation Rates, Trend, South Australia, Australia, Males, Females and Persons, June 1981 to June 2000

Source: ABS Labour Force Survey, various, Centre for Labour Research

	;	South Austra	alia		Australia	
	Males	Females	Persons	Males	Females	Persons
1981	77.4	45.2	60.9	78.2	44.7	61.2
1990	74.9	50.9	62.7	75.7	52.4	63.9
1991	73.4	51.4	62.2	74.6	52.0	63.1
1992	73.1	50.7	61.7	74.4	52.0	63.0
1993	72.4	50.7	61.4	73.6	51.5	62.4
1994	71.5	51.9	61.5	73.6	52.5	62.9
1995	71.7	52.5	61.9	73.9	53.9	63.7
1996	70.8	53.1	61.8	73.7	53.7	63.5
1997	71.5	52.6	61.8	73.0	53.6	63.1
1998	70.0	50.2	59.8	73.0	54.0	63.4
1999	69.7	51.3	60.3	72.7	53.8	63.1
2000	71.0	51.6	61.1	72.8	55.0	63.8

Figure 7.1: Participation Rates, Trend, South Australia, Australia, Males and Females, June 1990 to June 2000

Source: ABS Labour Force Survey, various, Centre for Labour Research

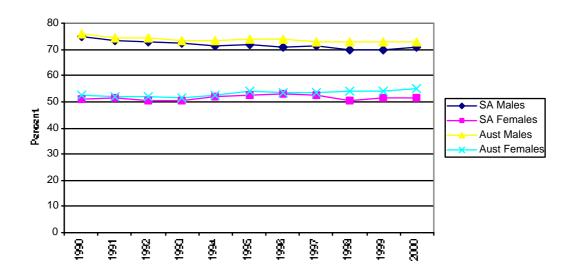
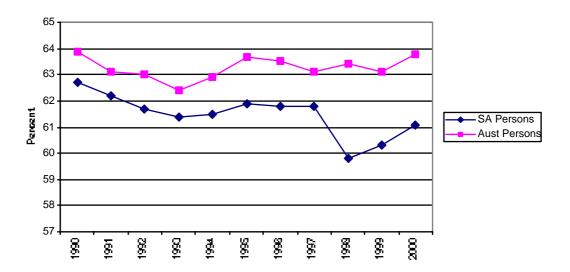


Figure 7.2: Participation Rates, Trend, South Australia, Australia, Persons, June 1990 to June 2000

Source: ABS Labour Force Survey, various, Centre for Labour Research



Male participation rates have been in steady decline in South Australia and Australia over the last twenty years reflecting the loss of employment in industries such as manufacturing where men have been historically overrepresented.

7.3.2 Employment change

Employment in South Australia has grown much more slowly than the nation and other mainland states over the last ten years. Slow relative employment growth and a decline in full-time employment are likely to be key drivers of population loss from South Australia.

Table 7.2 indicates that over the ten years to 2000 employment in South Australia increased by just 3 percent or 17,500 jobs. Employment rose from a peak of 652,500 in 1990 to 670,000 in 2000. In contrast employment grew by around 14 percent in Australia, 26 percent in Queensland, 22 percent in Western Australia, 14 percent in New South Wales and 8 percent in Victoria. Employment declined by -0.5 percent in Tasmania over the period.

Full-time employment declined in South Australia by 4.3 percent or 21,100 jobs over the 1990-2000 period. The only other mainland state to experience a decline in full-time employment over this period was Victoria which lost just 1,000 full-time jobs. Full-time employment grew most strongly in Queensland (17.4 percent), Western Australia (13 percent) and New South Wales (7.7 percent). Full-time employment growth in these states is likely to be attracting a large number of South Australian's faced with fewer full-time employment opportunities.

The growth of part-time employment in South Australia while significant, has not been as spectacular as the rest of Australia. Over the 1990-2000 period part-time employment increased by 42 percent. In South Australia it rose by 24 percent from around 160,000 in 1990 to around 199,000 in 2000. Part-time employment grew most strongly in Queensland (55.7 percent), Western Australia (53.7 percent), New South Wales (40.7 percent) and the ACT (45.2 percent).

Table 7.2: Change in Employment by Employment Status, Australia, States and Territories, All Persons, 1980-90 and 1990-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

State	Employment	1980	1990	2000	1980-90	1980-90	1990-2000	1990-2000	1980-2000
	status	'000s	'000s	'000s	change	change	change	change	change
					('000s)	(percent)	('000s)	(percent)	(percent)
NSW	Full-time	1894.5	2124.8	2289.1	230.3	12.2	164.3	7.7	20.8
	Part-time	356.7	536.8	755.3	180.1	50.5	218.5	40.7	111.7
	Total	2251.2	2661.6	3044.4	410.4	18.2	382.8	14.4	35.2
Vic	Full-time	1436.7	1636.7	1635.7	200.0	13.9	-1.0	-0.1	13.8
	Part-time	269.6	439.7	609.4	170.1	63.1	169.8	38.6	126.1
	Total	1706.3	2076.4	2245.1	370.1	21.7	168.7	8.1	31.6
Qld	Full-time	799.4	1034.9	1214.8	235.5	29.5	179.9	17.4	52.0
	Part-time	158.1	299.3	465.9	141.2	89.3	166.6	55.7	194.7
	Total	957.5	1334.2	1680.7	376.7	39.3	346.5	26.0	75.5
SA	Full-time	458.3	492.5	471.4	34.2	7.5	-21.1	-4.3	2.9
	Part-time	93.3	160.0	198.6	66.7	71.5	38.6	24.1	112.8
	Total	551.6	652.5	670.0	100.9	18.3	17.5	2.7	21.5
WA	Full-time	456.1	585.0	660.9	129.0	28.3	75.9	13.0	44.9
	Part-time	108.9	169.2	260.1	60.3	55.4	90.9	53.7	138.9
	Total	565.0	754.2	921.0	189.2	33.5	166.8	22.1	63.0
Tas	Full-time	146.2	153.8	140.6	7.5	5.2	-13.2	-8.6	-3.8
	Part-time	26.9	47.7	59.8	20.7	77.0	12.1	25.5	122.0
	Total	173.2	201.4	200.4	28.3	16.3	-1.0	-0.5	15.7
NT	Full-time	45.4	64.5	70.0	19.1	42.1	5.5	8.5	54.1
	Prt-time	9.4	14.6	18.8	5.2	55.9	4.2	28.6	100.4
	Total	54.8	79.1	88.8	24.3	44.4	9.7	12.2	62.1
ACT	Full-time	83.5	118.6	126.1	35.2	42.1	7.5	6.3	51.1
	Part-time	17.1	27.6	40.0	10.5	61.2	12.4	45.2	134.0
	Total	100.6	146.2	166.1	45.6	45.4	19.9	13.6	65.2
Aus	Full-time	5320.0	6210.8	6608.7	890.8	16.7	397.9	6.4	24.2
	Part-time	1040.0	1694.7	2407.8	654.7	63.0	713.1	42.1	131.5
	Total	6360.0	7905.5	9016.5	1545.5	24.3	1111.0	14.1	41.8

Employment growth remained relatively strong in New South Wales, Victoria, Queensland and Western Australia over the three years to 2000. Strong growth was experienced in the Northern Territory over 1998-99 while ACT employment growth was exceptionally strong in 1999, reflecting the likely employment impact associated with the administration of the GST.

A shorter run view of employment trends suggests that nearly all of the recent growth in employment has been part-time and more than two thirds of the increase is in male employment (see Table 7.3). Employment increased by around 18,300 jobs over the three years to 2000. Of these jobs, 96 percent or 17,300 were part-time while just 4 percent or 1000 were full-time. Around 68 percent of the net increase in jobs were in male employment.

Table 7.3: Employed Persons by Full-time and Part-time, Males and Females, South Australia, 1990-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Persons	1990	1995	1996	1997	1998	1999	2000
Full-time	492.5	470.7	463.5	464.3	470.3	468.5	471.3
Part-time	160.0	182.7	190.3	195.4	181.3	200.6	198.6
Total	652.5	653.3	653.8	659.7	651.6	669.1	670.0
Males							
Full-time	346.4	322.6	312.4	320.3	322.6	317.6	323.3
Part-time	32.5	46.4	48.7	50.2	44.7	56.6	55.8
Total	378.9	369.0	361.0	370.4	367.3	374.2	379.1
Females							
Full-time	146.1	148.0	151.1	144.1	147.7	150.9	148.0
Part-time	127.5	136.3	141.7	145.2	136.6	144.0	142.8
Total	273.5	284.3	292.8	289.2	284.3	294.9	290.9

7.3.3 Males and females

Over the 1990-2000 period employment growth outcomes for males and females have been far from uniform within the state and poor relative to the nation. While males have benefited more from recent growth in South Australia than have females, they have experienced a very significant loss of full-time employment (see Tables 7.4 and 7.5). Full-time employment for males declined by around 6.7 percent or 23,100 jobs. Female full-time employment increased marginally by 1.4 percent or around 2000 jobs.

Strong growth in female employment of around 35 percent over the 1980-90 period was followed by a period of slow growth through to 2000. Over the 1990-2000 period female employment in South Australia grew by around 6.3 percent from 273,500 to 290,900 or one third of the Australian increase of around 20 percent.

Female full-time employment grew by just 1.4 percent or 2,000 jobs in South Australia over the 1990-2000 period. This is in contrast to growth of around 16 percent or 19,800 jobs over the 1980-90 period.

Spectacular growth in part-time employment for females over the 1980-90 period was followed by relatively slow growth over the ten years to 2000. Part-time employment grew by around 66 percent or 50,600 over the 1980-90 period and just 12 percent or 15,300 jobs

over the ten years to 2000. Very slow employment growth for females over the three years to 2000 is likely to be a key driver of recent population loss.

Table 7.4: Change in Employment by Employment Status, Australia, States and Territories, Females, 1980-90 and 1990-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

State	Employment	1980	1990	2000	1980-90	1980-90	1990-2000	1990-2000	1980-2000
	status	'000s	'000s	'000s	change	change	change	change	change
					('000s)	(percent)	('000s)	(percent)	(percent)
NSW	Full-time	544.4	678.8	784.8	134.4	24.7	106.0	15.6	44.2
	Part-time	278.6	411.5	540.1	132.9	47.7	128.6	31.3	93.9
	Total	823.0	1090.2	1324.9	267.3	32.5	234.7	21.5	61.0
Vic	Full-time	428.0	541.4	544.1	113.4	26.5	2.7	0.5	27.1
	Part-time	210.9	342.1	446.3	131.2	62.2	104.2	30.5	111.6
	Total	638.9	883.5	990.4	244.6	38.3	106.9	12.1	55.0
Qld	Full-time	216.8	323.2	393.9	106.4	49.1	70.7	21.9	81.7
	Part-time	129.2	229.4	342.1	100.2	77.6	112.7	49.1	164.8
	Total	346.0	552.6	736.0	206.6	59.7	183.4	33.2	112.7
SA	Full-time	126.2	146.1	148.1	19.8	15.7	2.0	1.4	17.3
	Part-time	76.9	127.5	142.8	50.6	65.8	15.3	12.0	85.7
	Total	203.1	273.5	290.9	70.4	34.7	17.4	6.3	43.2
WA	Full-time	117.9	173.6	205.0	55.7	47.2	31.4	18.1	73.9
	Part-time	87.5	138.0	192.6	50.5	57.7	54.6	39.6	120.1
	Total	205.4	311.6	397.6	106.2	51.7	86.0	27.6	93.6
Tas	Full-time	37.3	44.2	45.1	6.9	18.4	0.9	2.1	21.0
	Part-time	22.8	37.4	44.8	14.7	64.3	7.4	19.7	96.6
	Total	60.1	81.6	89.9	21.5	35.8	8.3	10.2	49.6
NT	Full-time	13.7	21.5	27.5	7.7	56.4	6.0	28.1	100.3
	Part-time	6.1	10.2	11.2	4.1	65.9	1.0	9.8	82.1
	Total	19.9	31.7	38.7	11.8	59.3	7.0	22.2	94.7
ACT	Full-time	29.1	46.7	52.1	17.6	60.4	5.4	11.5	78.9
	Part-time	13.2	20.0	27.1	6.8	51.8	7.1	35.6	105.8
	Total	42.3	66.7	79.2	24.4	57.7	12.5	18.7	87.2
Aus	Full-time	1513.4	1975.4	2200.7	461.9	30.5	225.3	11.4	45.4
	Part-time	825.2	1316.1	1746.9	490.9	59.5	430.8	32.7	111.7
	Total	2338.6	3291.4	3947.6	952.8	40.7	656.2	19.9	68.8

South Australia had the slowest growth in female employment in Australia over the 1990-2000 period. The states and territories with the strongest growth in female employment over the 1990-2000 period were Queensland (33 percent or 183,400 jobs), Western Australia (28 percent or 86,000 jobs), New South Wales 22 percent or 234,700 jobs), Northern Territory (22 percent or 7,000 jobs) and the ACT (19 percent or 12,500 jobs). The strongest growth in full-time employment was in Queensland (22 percent or 70,700 jobs), Northern Territory (28 percent or 6,000 jobs), Western Australia (18 percent or 31,400 jobs), New South Wales (16 percent or 106,000 jobs) and the ACT (12 percent or 5,400 jobs).

jobs). This much stronger growth in female full-time employment is likely to be attracting a significant number of women from South Australia to other parts of Australia.

Table 7.5: Change in Employment by Employment Status, Australia, States and Territories, Males, 1980-90 and 1990-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

State	Employment	1980	1990	2000	1980-90	1980-90	1990-2000	1990-2000	1980-2000
	status	'000s	'000s	'000s	change	change	change	change	change
					('000s)	(percent)	('000s)	(percent)	(percent)
NSW	Full-time	1350.1	1446.0	1504.3	95.9	7.1	58.3	4.0	11.4
	Part-time	78.2	125.3	215.2	47.2	60.4	89.9	71.7	175.3
	Total	1428.3	1571.4	1719.5	143.1	10.0	148.1	9.4	20.4
Vic	Full-time	1008.7	1095.3	1091.6	86.6	8.6	-3.7	-0.3	8.2
	Part-time	58.6	97.6	163.1	38.9	66.3	65.6	67.2	178.1
	Total	1067.4	1192.9	1254.7	125.5	11.8	61.8	5.2	17.5
Qld	Full-time	582.6	711.7	820.9	129.1	22.2	109.2	15.3	40.9
	Part-time	28.9	69.9	123.8	41.0	141.7	53.9	77.2	328.2
	Total	611.5	781.6	944.7	170.1	27.8	163.1	20.9	54.5
SA	Full-time	332.0	346.4	323.3	14.4	4.3	-23.1	-6.7	-2.6
	Part-time	16.4	32.5	55.8	16.1	98.2	23.3	71.6	240.2
	Total	348.4	378.9	379.1	30.5	8.8	0.2	0.0	8.8
WA	Full-time	338.2	411.4	455.9	73.3	21.7	44.5	10.8	34.8
	Part-time	21.4	31.2	67.5	9.8	45.7	36.3	116.5	215.5
	Total	359.6	442.6	523.4	83.0	23.1	80.8	18.3	45.6
Tas	Full-time	108.9	109.6	95.5	0.7	0.6	-14.1	-12.9	-12.3
	Part-time	4.1	10.2	15.0	6.1	146.5	4.8	46.7	261.6
	Total	113.1	119.8	110.5	6.7	6.0	-9.3	-7.8	-2.3
NT	Full-time	31.7	43.1	42.5	11.4	35.9	-0.6	-1.3	34.1
	Part-time	3.2	4.4	7.6	1.2	36.7	3.2	72.1	135.2
	Total	34.9	47.5	50.1	12.6	35.9	2.6	5.5	43.5
ACT	Full-time	54.3	71.9	74.0	17.6	32.3	2.1	2.9	36.2
	Part-time	3.9	7.6	12.9	3.6	92.8	5.3	70.6	228.9
	Total	58.3	79.5	86.9	21.2	36.4	7.4	9.4	49.2
Aus	Full-time	3806.6	4235.4	4408.0	428.9	11.3	172.6	4.1	15.8
	Part-time	214.8	378.7	660.9	163.8	76.3	282.2	74.5	207.7
	Total	4021.4	4614.1	5068.9	592.7	14.7	454.8	9.9	26.0

Disturbingly, employment levels for males in South Australia have been static over the 1990-2000 period. In contrast male employment increased by around 10 percent in Australia. The slow recent growth in South Australia is in stark contrast to the 1980-90 period when employment grew by around 9 percent or 30,500 jobs. Over the twenty years to 2000 male employment increased by around 9 percent in South Australia compared with 26 percent for the nation as whole.

There has been a spectacular long run increase in male part-time employment. Over the twenty years to 2000 it grew by around 240 percent, rising from 16,400 in 1980 to 55,800 in

2000. Over the 1990-2000 period male part-time employment growth has been strong but slower, growing by around 72 percent or 23,300 jobs.

The most disturbing feature of recent male employment trends has been the collapse in full-time employment over the 1990-2000 period discussed at the beginning of this section. Static employment levels and a sustained decline in male full-time employment are likely to be among the central drivers of population loss to other parts of Australia.

The states and territories with the strongest growth in male employment over the 1990-2000 period were Queensland (20.9 percent), Western Australia (18.3 percent), New South Wales (9.4 percent) and the ACT (9.4 percent). The strongest growth in full-time employment was in Queensland (15.3 percent or 109,200 jobs), Western Australia (10.8 percent or 44,500 jobs), and the ACT (2.9 percent or 2,100 jobs).

7.3.4 Changing composition of full-time/part-time employment

As the previous discussion indicates there has been a significant shift in the balance between full-time and part-time employment in South Australia over the 1980-2000 period. Over this period part-time employment as a percentage of total employment has risen steadily. At the beginning of the 1980s part-time employment in South Australia constituted around 17 percent of total employment, slightly more than Australia as whole. By 2000 this gap had widened significantly (see Figure 7.3 and Table 7.6).

Figure 7.3: Employed Persons, Australia and South Australia, Full-time and Parttime as a Percentage of Total Employment, All Persons, 1980-2000

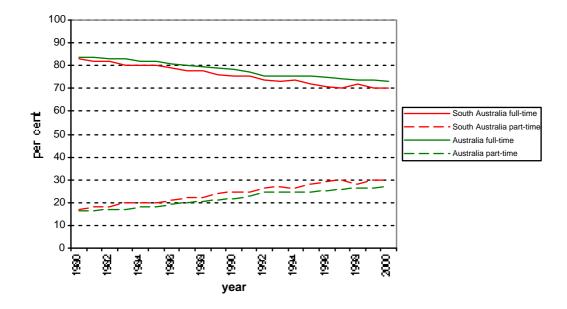


Table 7.6: Employed Persons, Australia and South Australia, Full-time and Parttime as a Percentage of Total Employment, All Persons, 1980-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Sth Aust full-time	83.1	75.5	75.4	73.7	73.4	73.9	72.0	70.9	70.4	72.2	70.0	70.3
Sth Aust part-time	16.9	24.5	24.6	26.3	26.6	26.1	28.0	29.1	29.6	27.8	30.0	29.7
Australia full-time	83.6	78.6	77.1	75.7	75.7	75.6	75.3	74.7	74.1	73.9	73.6	73.3
Australia part-time	16.4	21.4	22.9	24.3	24.3	24.4	24.7	25.3	25.9	26.1	26.4	26.7

The proportion of part-time employment in South Australia reached 30 percent compared with 27 percent for Australia in 2000. The proportion of men in part-time employment in South Australia trebled from around 5 percent in 1980 to 15 percent in 2000 while in Australia it rose from 5 percent to around 13 percent (see Figure 7.4 and Table 7.7). As the turn of the century approached it was apparent that more women would be employed in part-time employment than full-time employment. Around 49 percent of female employment in South Australia was part-time by 2000, rising from around 38 percent in 1980 (see Figure 7.5 and Table 7.8). In Australia around 45 percent of all female employment was part-time in 1999, rising from around 35 percent in 1980.

Figure 7.4: Employed Persons, Australia and South Australia, Full-time and Parttime as a Percentage of Total Employment, Males, 1980-2000

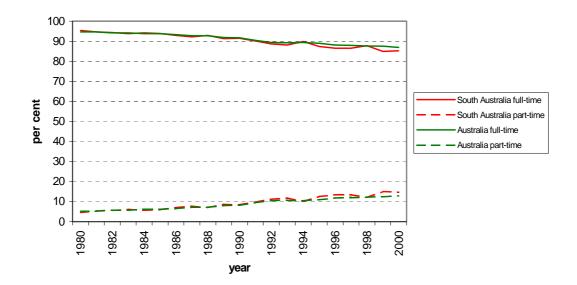


Table 7.7: Employed Persons, Australia and South Australia, Full-time and Parttime as a Percentage of Total Employment, Males, 1980-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Sth Aust full-time	95.3	91.4	90.2	88.8	88.2	89.9	87.4	86.5	86.5	87.8	84.9	85.3
Sth Aust part-time	4.7	8.6	9.8	11.2	11.8	10.1	12.6	13.5	13.5	12.2	15.1	14.7
Australia full-time	94.7	91.8	90.4	89.4	89.3	89.4	89.0	88.2	87.9	87.6	87.6	87.0
Australia part-time	5.3	8.2	9.6	10.6	10.7	10.6	11.0	11.8	12.1	12.4	12.4	13.0

Figure 7.5: Employed Persons, Australia and South Australia, Full-time and Parttime as a Percentage of Total Employment, Females, 1980-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

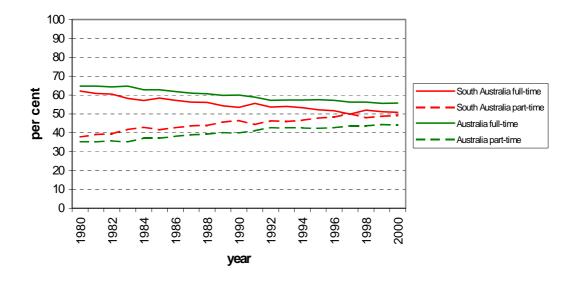


Table 7.8: Employed Persons, Australia and South Australia, Full-time and Parttime as a Percentage of Total Employment, Females, 1980-2000

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Sth Aust full-time	62.1	53.4	55.6	53.7	53.9	53.2	52.1	51.6	49.8	52.0	51.2	50.9
Sth Aust part-time	37.9	46.6	44.4	46.3	46.1	46.8	47.9	48.4	50.2	48.0	48.8	49.1
Australia full-time	64.7	60.0	58.9	57.2	57.3	57.4	57.5	57.1	56.2	56.2	55.5	55.7
Australia part-time	35.3	40.0	41.1	42.8	42.7	42.6	42.5	42.9	43.8	43.8	44.5	44.3

7.3.5 Regional variations in the full-time/part-time composition of employment

South Australia maintains the highest proportions of part-time employment among men and women of all the states (see Tables 7.9–7.10). Male part-time employment as a percentage of total employment rose from 8.6 percent in 1990 to around 15 percent in 2000. This compares with around 13 percent in Victoria and Western Australia and 12.5 percent in New South Wales. For females it was around 49 percent in South Australia with Western Australia and Tasmania recording 48 percent. The proportion of females in part-time employment in Victoria was 45 percent and 42 percent in New South Wales.

Table 7.9: Part-time Employment, Australia, States and Territories, 1980-2000, as a Percentage of Total Employment, Females

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
NSW	33.9	37.7	38.1	40.8	40.7	39.8	39.2	40.2	41.0	40.7	41.7	40.8
Vic	33.0	38.7	41.4	41.3	41.7	43.5	44.4	43.4	44.3	44.1	45.1	45.1
Qld	37.3	41.5	42.7	44.8	44.0	43.0	42.0	42.8	45.0	44.7	45.8	46.5
SA	37.9	46.6	44.4	46.3	46.1	46.8	47.9	48.4	50.2	48.0	48.8	49.1
WA	42.6	44.3	46.7	45.8	47.3	46.3	46.0	45.6	46.5	48.5	48.1	48.4
Tas	37.9	45.9	46.7	49.1	47.5	49.7	46.6	50.2	50.8	52.5	48.0	49.8
NT	30.9	32.2	27.9	37.3	35.0	32.6	36.7	36.5	29.2	29.5	35.1	28.9
ACT	31.1	30.0	34.1	44.5	39.5	35.3	40.9	39.7	35.6	38.8	36.7	34.2
Australia	35.3	40.0	41.1	42.8	42.7	42.6	42.5	42.9	43.8	43.8	44.5	44.3

Table 7.10: Part-time Employment, Australia, States and Territories, 1980-2000, as a Percentage of Total Employment, Males

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
NSW	5.5	8.0	8.9	9.5	10.2	10.7	10.9	11.2	11.1	11.1	11.4	12.5
Vic	5.5	8.2	9.5	11.4	10.7	10.7	10.3	12.3	12.8	13.2	13.2	13.0
Qld	4.7	8.9	10.2	10.8	10.6	10.1	11.6	11.5	12.6	13.3	11.6	13.1
SA	4.7	8.6	9.8	11.2	11.8	10.1	12.6	13.5	13.5	12.2	15.1	14.7
WA	6.0	7.0	10.3	10.9	10.8	10.8	10.1	11.5	10.9	12.2	12.6	12.9
Tas	3.7	8.5	9.7	10.1	9.8	11.9	12.4	12.7	13.5	15.0	12.0	13.6
NT	9.3	9.3	6.5	13.6	13.6	9.0	13.6	13.5	11.6	11.3	11.8	15.2
ACT	6.7	9.5	12.2	10.9	12.3	13.5	14.2	14.5	14.0	16.0	18.2	14.8
Australia	5.3	8.2	9.6	10.6	10.7	10.6	11.0	11.8	12.1	12.4	12.4	13.0

7.3.6 Industry employment growth and decline

The growth of high wage, high skill and secure employment is a vital ingredient to retaining and attracting people to work in South Australia. Recent industry employment trends in South Australia indicate that employment growth over the last ten years has been confined to only a few sectors, concentrated in relatively low wage industries and much of the growth has been part-time. These industry employment trends make it more difficult to retain and attract skilled and experienced people in employment.

Only six out of thirteen industry sectors experienced employment growth over the 1990-2000 period (see Table 7.11 and Figure 7.6). They were Property and Business Services (53 percent), Accommodation, Cafes and Restaurants (53 percent), Construction (33 percent), Education (17 percent), Personal and other Services (13 percent), Government Administration and Defence (5 percent).

The sectors experiencing the most significant decline in employment include Electricity, Gas and Water (-44 percent), Mining (-31 percent), Wholesale Trade (-32 percent), Finance and Insurance (-19 percent), Manufacturing (-13 percent), Transport and Storage (-13 percent) and Agriculture, Forestry and Fishing (-4 percent).

Table 7.11: Employment by Industry, South Australia, Persons, 1990-2000

Feb-May avg	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Persons - total	'000s	'000s	'000s	difference	difference	percent	percent
				('000s)	('000s)	change	change
							Ranked
Property and Business Services	42.7	55.8	66.9	24.2	11.1	56.7	19.9
Accommodation, Cafes and Restaurants	21.8	26.8	33.4	11.6	6.7	53.2	24.9
Construction	35.3	37.4	47.1	11.8	9.7	33.3	25.8
Education	42.0	46.6	49.1	7.1	2.5	16.9	5.4
Personal and Other Services	25.5	26.8	28.9	3.4	2.2	13.3	8.0
Government Administration and Defence	25.0	20.4	26.2	1.2	5.8	4.6	28.2
Health and Community Services	69.2	69.9	69.8	0.6	-0.1	0.8	-0.1
Cultural and Recreational Services	14.1	13.7	14.1	0.0	0.4	0.0	2.9
Communication Services	11.4	12.0	11.4	0.0	-0.6	0.0	-5.0
Retail Trade	93.9	96.2	91.9	-2.1	-4.4	-2.2	-4.5
Agriculture, Forestry and Fishing	50.8	46.9	49.1	-1.8	2.2	-3.4	4.6
Transport and Storage	28.5	30.5	24.9	-3.6	-5.6	-12.6	-18.2
Manufacturing	115.0	102.5	100.0	-15.0	-2.5	-13.0	-2.4
Finance and Insurance	24.3	21.9	19.8	-4.6	-2.1	-18.7	-9.6
Mining	5.4	3.4	3.8	-1.7	0.4	-30.6	11.9
Wholesale Trade	43.7	35.4	29.7	-14.0	-5.7	-32.0	-16.0
Electricity, Gas and Water Supply	9.8	5.3	5.5	-4.3	0.2	-43.9	3.8
Total: All Industries	658.5	651.2	671.3	12.8	20.2	1.9	3.1

Figure 7.6: Employment Change by Industry, South Australia, Persons, 1990-2000

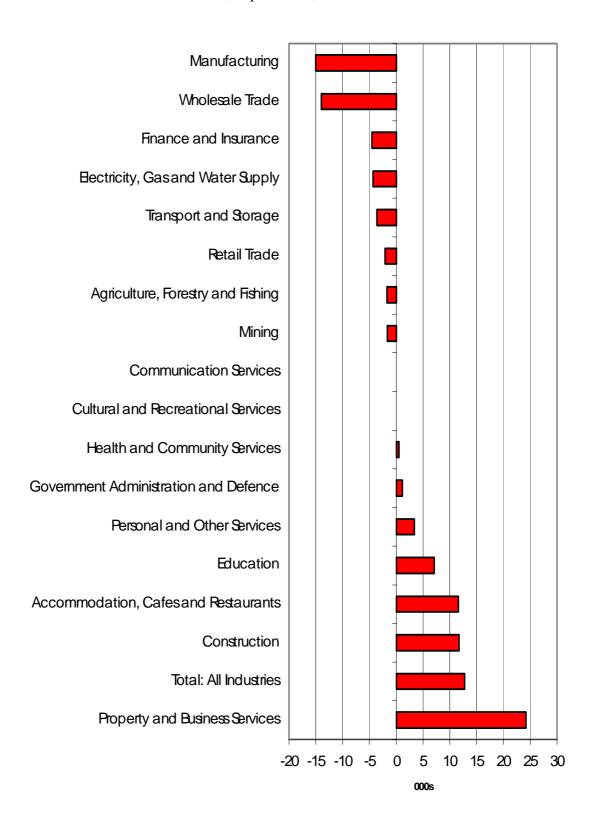


Table 7.12 and Figure 7.7 indicate that only six out of thirteen industry sectors experienced full-time employment growth over the 1990-2000 period. They were Accommodation, Cafes and Restaurants (56 percent), Property and Business Services (39 percent), Construction (28 percent), Education (12 percent), Government Administration and Defence (5 percent) and Personal and other Services (9 percent). Sectors experiencing a decline in full-time employment over the ten year period include Electricity, Gas and Water (-44 percent), Wholesale Trade (-36 percent), Mining (-33 percent), Finance and Insurance (-26 percent), Transport and Storage (-23 percent) and Manufacturing (-15 percent).

Most industry sectors experienced an increase in part-time employment over the last decade (see Table 7.13). This is most spectacularly illustrated by the Property and Business Service sector where part-time employment increased by 120 percent from 9,300 to 20,500 persons. Other sectors to experience a significant increase in part-time employment include Transport and Storage (92 percent), Construction (70 percent), Electricity, Gas and Water (50 percent), Communication Services (44 percent), Education (28 percent), Personal and other Services (25 percent) and Cultural and Recreational Services (18 percent). The only sectors to experience a decline in part-time employment were Mining (-25 percent), Retail Trade (7 percent) and Wholesale Trade (7 percent). Each of these sectors experienced an overall decline in employment during the period.

Table 7.12: Employment by Industry, South Australia, Full-time Employed Persons, 1990-2000

Feb-May avg	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Persons- full-time	'000s	'000s	'000s	change	change	percent	percent
				('000s)	('000s)	change	change
Accommodation, Cafes and Restaurants	9.8	12.9	15.3	5.5	2.4	55.6	18.7
Property and Business Services	33.4	38.6	46.4	13.0	7.8	38.9	20.2
Construction	30.7	31.7	39.3	8.6	7.7	28.0	24.2
Education	30.2	31.9	33.9	3.7	2.0	12.1	6.1
Personal and Other Services	18.1	18.7	19.7	1.6	1.0	8.6	5.1
Government Administration and Defence	22.1	18.3	23.3	1.2	5.0	5.2	27.4
Agriculture, Forestry and Fishing	37.0	34.4	36.3	-0.8	1.9	-2.0	5.4
Communication Services	10.6	9.6	10.3	-0.4	0.7	-3.3	6.8
Retail Trade	57.2	56.4	51.8	-5.4	-4.6	-9.4	-8.2
Health and Community Services	41.1	40.3	37.1	-4.1	-3.2	-9.9	-8.0
Cultural and Recreational Services	8.4	8.8	7.4	-1.1	-1.5	-12.5	-16.5
Manufacturing	105.1	92.9	89.0	-16.2	-4.0	-15.4	-4.3
Transport and Storage	26.1	26.2	20.1	-6.0	-6.1	-23.0	-23.1
Finance and Insurance	20.3	17.7	15.0	-5.3	-2.7	-26.1	-15.0
Mining	5.1	2.9	3.4	-1.7	0.5	-33.3	17.2
Wholesale Trade	37.6	29.2	24.0	-13.7	-5.3	-36.3	-18.0
Electricity, Gas and Water Supply	9.6	5.3	5.4	-4.3	0.1	-44.3	1.9
Total: All Industries	502.4	475.5	477.4	-25.1	1.9	-5.0	0.4

Figure 7.7: Employment Change by Industry, South Australia, Part-time and Full-time, Persons, 1990-2000

Source: ABS Labour Force, unpublished

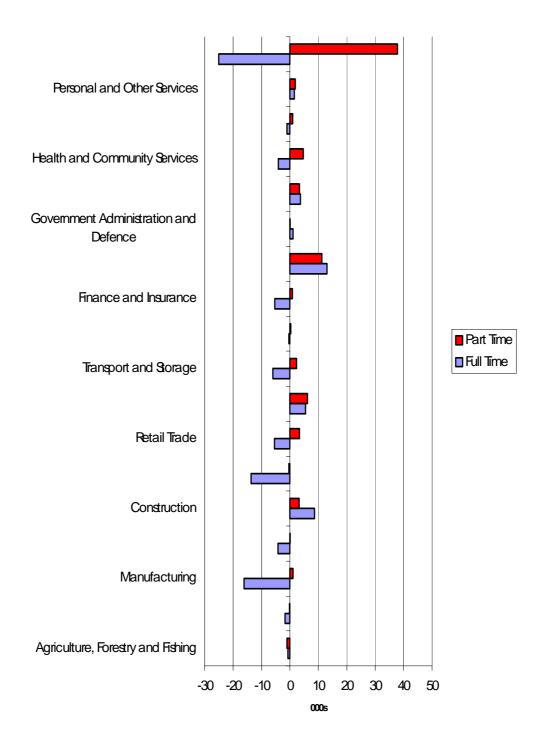


Table 7.13: Employment by Industry, South Australia, Part-time Employed Persons, 1990-2000

Source: ABS Labour Force, unpublished, Centre for Labour Research

Feb-May avg	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Persons - part-time	'000s	'000s	'000s	difference	difference	percent	percent
				('000s)	('000s)	change	change
Property and Business Services	9.3	17.2	20.5	11.2	3.3	120.4	19.2
Transport and Storage	2.5	4.3	4.8	2.3	0.5	92.0	11.6
Construction	4.6	5.8	7.8	3.2	2.1	69.6	35.7
Accommodation, Cafes and Restaurants	12.0	13.9	18.2	6.2	4.3	51.3	30.6
Electricity, Gas and Water Supply	0.2	0.2	0.3	0.1	0.1	50.0	50.0
Communication Services	0.8	2.4	1.2	0.4	-1.3	43.8	-52.1
Education	11.9	14.7	15.3	3.4	0.6	28.2	3.7
Personal and Other Services	7.4	8.1	9.3	1.85	1.2	25.0	14.9
Finance and Insurance	3.9	4.3	4.8	0.9	0.5	21.8	11.8
Cultural and Recreational Services	5.7	4.9	6.7	1.0	1.8	17.5	36.7
Health and Community Services	28.1	29.6	32.8	4.7	3.2	16.5	10.8
Manufacturing	9.9	9.6	11.0	1.1	1.4	11.1	14.6
Retail Trade	36.7	39.8	40.0	3.3	0.3	9.0	0.6
Government Administration and Defence	2.8	2.2	2.9	0.1	0.8	3.6	34.9
Wholesale Trade	6.1	6.2	5.7	-0.4	-0.5	-6.6	-7.3
Agriculture, Forestry and Fishing	13.8	12.5	12.8	-1.0	0.3	-7.2	2.4
Mining	0.4	0.5	0.3	-0.1	-0.2	-25.0	-33.3
Total: All Industries	156.1	175.7	194.0	37.9	18.3	24.2	10.4

The key features of male and female industry employment trends over the 1990-2000 period include ...

- a pattern of part-time employment growth and full-time employment loss across a majority of industry sectors for males and females;
- a dramatic decline in male full-time employment and a marginal increase in female full-time employment;
- employment growth was restricted to fewer industry sectors for males and declined in a larger number of sectors compared with females;
- a large proportion of industry employment growth for males and females is concentrated in relatively low wage industry sectors.

Employment grew in 6 and declined in 11 out of 17 industry sectors for males over the 1990-2000 period (see Table 7.14). Overall industry employment declined by 1.5 percent or 5,950 over the period. There were 28,000 less full-time jobs and 22,200 more part-time jobs at the end of the period.

The industries experiencing significant percentage increases in male employment include Accommodation, Cafes and Restaurants (59 percent), Property and Business Services (46 percent), Construction (36 percent), Personal and other Services (33 percent), Cultural and Recreational Services (19 percent) and Government Administration and Defence (14 percent).

The sectors experiencing a significant decline in male employment over the 1990-2000 period include Electricity, Gas and Water (-51 percent), Wholesale Trade (-33 percent), Mining (-26 percent), Finance and Insurance (-25 percent), Health and Community Services (-23 percent) and Transport and Storage (-19 percent), Manufacturing (-11 percent) and Communication Services (-9 percent).

Table 7.14: Employment by Industry, South Australia, Males, 1990-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Males – Total	'000s	'000s	'000s	difference	difference	percent	percent
				('000s)	('000s)	change	change
Feb-May average	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Accommodation, Cafes and Restaurants	8.4	11.1	13.4	5.0	2.3	58.9	20.3
Property and Business Services	24.7	31.2	36.1	11.4	5.0	46.2	15.9
Construction	29.9	31.4	40.6	10.7	9.2	35.8	29.3
Personal and Other Services	11.9	13.5	15.8	3.9	2.4	32.8	17.5
Cultural and Recreational Services	6.5	5.9	7.7	1.2	1.8	18.5	30.5
Education	15.1	17.6	17.3	2.2	-0.3	14.2	-1.7
Government Administration and Defence	14.9	11.1	14.9	-0.1	3.8	-0.3	34.4
Retail Trade	47.9	47.1	47.3	-0.6	0.3	-1.3	0.5
Agriculture, Forestry and Fishing	35.9	32.1	33.6	-2.3	1.5	-6.4	4.7
Communication Services	9.1	8.6	8.3	-0.8	-0.3	-8.8	-2.9
Manufacturing	83.9	75.5	74.9	-9.1	-0.6	-10.8	-0.8
Transport and Storage	24.0	23.9	19.5	-4.5	-4.4	-18.8	-18.4
Health and Community Services	18.0	15.5	13.9	-4.1	-1.6	-22.8	-10.0
Finance and Insurance	11.4	9.6	8.6	-2.9	-1.0	-25.0	-10.5
Mining	4.4	2.7	3.3	-1.2	0.6	-26.1	22.6
Wholesale Trade	30.9	25.7	20.8	-10.1	-4.9	-32.7	-18.9
Electricity, Gas and Water Supply	9.2	4.3	4.5	-4.7	0.2	-51.1	4.7
Total: All Industries	386.0	366.3	380.1	-6.0	13.8	-1.5	3.8

Males experienced an 8 percent or 28,150 decline in full-time industry employment over the 1990-2000 period (see Table 7.15 and Figure 7.8). Full-time employment grew in only 7 out of 17 industry sectors. In the remaining sectors it declined significantly. Where growth has occurred it is largely concentrated in relatively low wage, low skill sectors. Full-time employment for males grew significantly only in five sectors including Accommodation, Cafes and Restaurants (45 percent), Property and Business Services (34 percent), Construction (30 percent), Personal and other Services (19 percent) and Cultural and Recreational Services (14 percent).

Male part-time employment grew very significantly by nearly 70 percent or 22,200 over the 1990-2000 period (see Table 7.16). For most sectors this growth has been from a very low base, reflecting the historically low levels of male part-time employment. The sectors with the largest percentage increases were Communication Services (500 percent), Transport and Storage (250 percent), Property and Business Services (185 percent), Education (175 percent), Construction (154 percent), Manufacturing (147 percent), Personal and other Services (123 percent).

Figure 7.8: Employment by Industry, South Australia, Males, Full-time and Parttime, 1990-2000

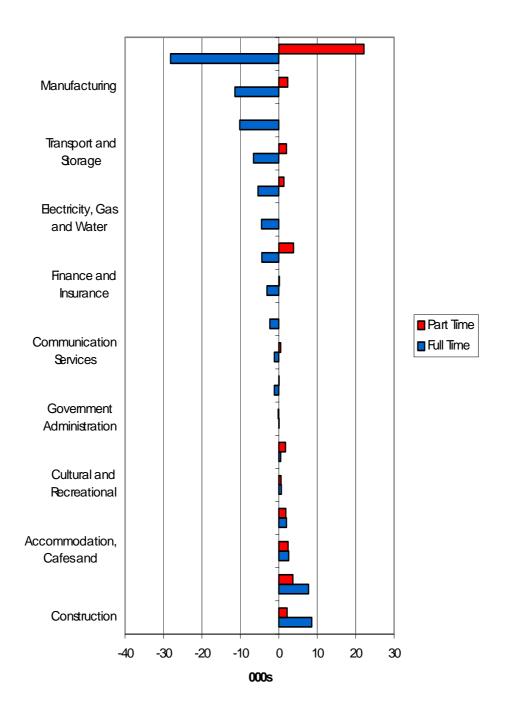


Table 7.15: Employment by Industry, South Australia, Full-time, Males, 1990-2000

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Males – Full-time	'000s	'000s	'000s	Difference	Difference	Percent	Percent
				('000s)	('000s)	change	change
February-May average	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Accommodation, Cafes and Restaurants	5.7	7.0	8.3	2.6	1.3	44.7	17.9
Property and Business Services	22.7	25.9	30.5	7.8	4.6	34.1	17.8
Construction	28.5	28.9	37.1	8.6	8.2	30.0	28.4
Personal and Other Services	10.4	10.7	12.4	2.0	1.7	19.2	15.9
Cultural and Recreational Services	4.5	4.6	5.2	0.7	0.6	14.4	13.2
Education	14.0	14.8	14.5	0.5	-0.3	3.6	-2.0
Government Administration and Defence	14.2	10.8	14.3	0.1	3.5	0.7	32.4
Agriculture, Forestry and Fishing	31.3	28.5	29.0	-2.3	0.5	-7.3	1.8
Retail Trade	38.2	35.3	33.8	-4.5	-1.5	-11.6	-4.3
Communication Services	8.9	7.7	7.7	-1.2	0.0	-13.5	0.0
Manufacturing	82.3	72.4	70.9	-11.4	-1.5	-13.9	-2.0
Finance and Insurance	11.0	9.3	8.0	-3.1	-1.4	-27.7	-14.5
Mining	4.3	2.3	3.1	-1.2	0.8	-27.9	34.8
Transport and Storage	23.2	22.2	16.7	-6.6	-5.5	-28.2	-24.8
Health and Community Services	16.3	13.0	10.9	-5.5	-2.1	-33.4	-16.2
Wholesale Trade	29.5	24.1	19.4	-10.2	-4.8	-34.4	-19.7
Electricity, Gas and Water Supply	9.0	4.3	4.5	-4.5	0.2	-50.0	4.7
Total: All Industries	354.0	321.4	325.9	-28.2	4.5	-8.0	1.4

Table 7.16: Employment by Industry, South Australia, Males, Part-time 1990-2000

Males – Part-time	'000s	'000s	'000s	Difference	Difference	Percent	Percent
				('000s)	('000s)	change	change
February-May average	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Communication Services	0.1	1.0	0.6	0.5	-0.4	500.0	-36.8
Transport and Storage	0.8	1.8	2.8	2.0	1.1	250.0	60.0
Property and Business Services	2.0	5.2	5.7	3.7	0.5	185.0	9.6
Education	1.0	2.8	2.8	1.8	0.0	175.0	0.0
Construction	1.4	2.6	3.6	2.2	1.0	153.6	36.5
Manufacturing	1.6	3.1	4.0	2.4	0.9	146.9	27.4
Personal and Other Services	1.5	2.8	3.4	1.9	0.6	123.3	21.8
Mining	0.1	0.35	0.2	0.1	-0.2	100.0	-42.9
Accommodation, Cafes and Restaurants	2.7	4.1	5.1	2.4	1.0	88.9	24.4
Health and Community Services	1.7	2.4	3.0	1.3	0.6	76.5	25.0
Finance and Insurance	0.4	0.3	0.6	0.2	0.3	50.0	100.0
Retail Trade	9.7	11.9	13.6	3.9	1.7	39.7	14.3
Cultural and Recreational Services	2.0	1.3	2.6	0.6	1.3	27.5	96.2
Agriculture, Forestry and Fishing	4.6	3.6	4.6	0.0	1.0	0.0	27.8
Wholesale Trade	1.4	1.6	1.4	0.0	-0.2	0.0	-12.5
Government Administration and Defence	0.7	0.5	0.6	-0.2	0.1	-21.4	10.0
Electricity, Gas and Water Supply	0.2	n/a	n/a	n/a	n/a	n/a	n/a
Total: All Industries	32.0	44.9	54.2	22.2	9.3	69.4	20.7

Employment grew in 10 and declined in 7 industry sectors for females over the 1990-2000 period (see Table 7.17 and Figure 7.8). Overall female industry employment grew by nearly 7 percent over the period. Around 84 percent of the net increase in female employment over the period comprised part-time employment.

Table 7.17: Employment by Industry, South Australia, Females, 1990-2000

Source: ABS Labour Force Survey, unpublished

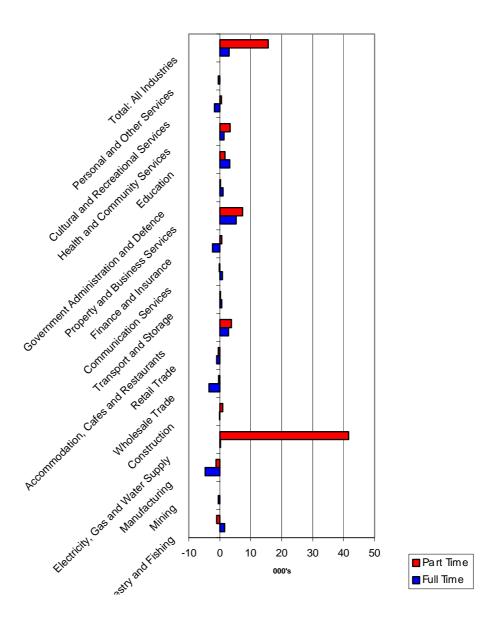
Females – Total	'000s	'000s	'000s	Diff ('000s)	Diff ('000s)	Percent change	Percent change
feb-may avg	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Electricity, Gas and Water Supply	0.6	1.0	1.1	0.5	0.1	75.0	5.0
Property and Business Services	18.0	24.7	30.9	12.9	6.2	71.4	24.9
Accommodation, Cafes and Restaurants	13.4	15.7	20.1	6.7	4.4	49.6	28.1
Communication Services	2.4	3.5	3.1	0.7	-0.4	29.2	-10.1
Transport and Storage	4.5	6.6	5.4	0.9	-1.2	20.0	-17.6
Construction	5.4	6.0	6.5	1.1	0.5	19.4	7.5
Education	26.9	29.1	31.9	5.0	2.8	18.4	9.5
Government Administration and Defence	10.0	9.4	11.3	1.3	2.0	13.0	20.9
Health and Community Services	51.2	54.4	55.9	4.7	1.5	9.1	2.7
Agriculture, Forestry and Fishing	14.9	14.8	15.5	0.6	0.7	3.7	4.4
Retail Trade	46.0	49.2	44.6	-1.5	-4.6	-3.2	-9.4
Personal and Other Services	13.6	13.3	13.1	-0.5	-0.2	-3.7	-1.5
Finance and Insurance	12.9	12.3	11.3	-1.7	-1.1	-12.8	-8.5
Cultural and Recreational Services	7.5	7.8	6.4	-1.2	-1.5	-15.3	-18.6
Manufacturing	31.1	27.0	25.2	-6.0	-1.9	-19.1	-6.9
Wholesale Trade	12.8	9.7	9.0	-3.9	-0.8	-30.1	-7.7
Mining	1.1	0.7	0.5	-0.6	-0.2	-54.5	-28.6
Total: All Industries	272.5	284.9	291.2	18.7	6.3	6.9	2.2

The industries experiencing the largest percentage increases in female employment include Electricity, Gas and Water (75 percent), Property and Business Services (71 percent), Accommodation, Cafes and Restaurants (50 percent), Communication Services (29 percent), Transport and Storage (20 percent), Construction (19 percent), Education (18 percent), Government Administration and Defence (13 percent) and Health and Community Services (13 percent).

Industry sectors experiencing a significant percentage decline in female employment include Mining (-54 percent), Wholesale Trade (-30 percent), Manufacturing (19 percent), Cultural and Recreational Services (15 percent) and Finance and Insurance (13 percent).

Over the 1990-2000 period there was a 2 percent or 3,050 net increase in female full-time industry employment and a 13 percent or 15,650 increase in part-time employment (see Tables 7.18-7.19 and Figure 7.9).

Figure 7.9: Employment by Industry, South Australia, Females, Full-time and Parttime, 1990-2000



Nine industry sectors experienced a percentage increase in female full-time employment over the 1990-2000 period including Accommodation, Cafes and Restaurants (67 percent), Communication Services (50 percent), Property and Business Services (50 percent), Electricity, Gas and Water Supply, (42 percent), Agriculture, Forestry and Fishing (27 percent), Transport and Storage (23 percent), Education (20 percent), Government Administration and Defence (14 percent) and Health and Community Services (5 percent). It should be noted that the Electricity, Gas and Water Supply and Transport and Storage sectors experienced a decline of -11 percent and -15 percent respectively in female full-time employment over the 1995-2000 period.

Nine industry sectors experienced a percentage increase in part-time employment over the 1990-2000 period. The most significant increases include Property and Business Services (100 percent), Accommodation, Cafes and Restaurants (40 percent), Construction (31 percent), Finance and Insurance (19 percent), Education (16 percent), Transport and Storage (15 percent), Cultural and Recreational Services (13.5 percent), Health and Community Services (12.5 percent) and Government Administration and Defence (11.9 percent).

Table 7.18: Employment by Industry, South Australia, Females, Full-time, 1990-2000

Females – Full-time	'000s	'000s	'000s	Diff ('000s)	Diff ('000s)	Percent	Percent
						change	change
feb-may avg	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Accommodation, Cafes and Restaurants	4.2	5.8	7.0	2.8	1.2	66.7	20.7
Communication Services	1.7	1.9	2.6	0.9	0.7	50.0	34.2
Property and Business Services	10.7	12.7	16.0	5.3	3.3	49.5	26.0
Electricity, Gas and Water Supply	0.6	1.0	0.9	0.3	-0.1	41.7	-10.5
Agriculture, Forestry and Fishing	5.7	5.9	7.3	1.6	1.4	27.2	22.9
Transport and Storage	2.8	4.1	3.5	0.7	-0.6	23.2	-14.8
Education	16.1	17.2	19.4	3.3	2.2	20.2	12.8
Government Administration and Defence	7.9	7.5	9.0	1.1	1.6	13.9	20.8
Health and Community Services	24.8	27.3	26.2	1.4	-1.1	5.4	-4.0
Construction	2.3	2.9	2.3	-0.1	-0.7	-2.2	-22.4
Retail Trade	19.0	21.2	18.1	-1.0	-3.2	-5.0	-14.9
Personal and Other Services	7.7	8.0	7.3	-0.5	-0.7	-5.8	-8.8
Manufacturing	22.8	20.6	18.1	-4.8	-2.5	-20.8	-12.2
Finance and Insurance	9.4	8.4	7.1	-2.4	-1.3	-25.0	-15.6
Wholesale Trade	8.1	5.2	4.6	-3.5	-0.6	-43.2	-10.7
Cultural and Recreational Services	3.9	4.2	2.2	-1.7	-2.0	-43.6	-47.6
Mining	0.8	0.6	0.4	-0.5	-0.3	-56.3	-41.7
Total: All Industries	148.4	154.1	151.5	3.1	-2.6	2.1	-1.7

Table 7.19: Employment by Industry, South Australia, Females, Part-time, 1990-2000

Source: ABS Labour Force Survey, unpublished

Females – Part-time	'000s	'000s	'000s	Diff ('000s)	Diff ('000s)	Percent	Percent
						change	change
February-May average	1990	1995	2000	1990-2000	1995-2000	1990-2000	1995-2000
Property and Business Services	7.4	12.0	14.8	7.4	2.8	100.0	23.3
Accommodation, Cafes and Restaurants	9.3	9.8	13.1	3.8	3.3	40.3	33.2
Construction	3.2	3.1	4.2	1.0	1.1	31.3	35.5
Finance and Insurance	3.5	4.0	4.2	0.7	0.2	18.6	5.1
Education	10.8	12.0	12.5	1.7	0.5	15.7	4.2
Transport and Storage	1.7	2.5	2.0	0.3	-0.6	14.7	-22.0
Cultural and Recreational Services	3.7	3.6	4.2	0.5	0.6	13.5	16.7
Health and Community Services	26.4	27.2	29.7	3.3	2.6	12.5	9.4
Government Administration and Defence	2.1	1.9	2.4	0.3	0.5	11.9	23.7
Mining	0.2	0.2	0.2	0.0	0.0	0.0	0.0
Personal and Other Services	5.9	5.4	5.9	0.0	0.6	0.0	10.3
Retail Trade	27.0	28.0	26.5	-0.5	-1.5	-1.9	-5.2
Wholesale Trade	4.7	4.6	4.4	-0.4	-0.2	-7.4	-4.4
Agriculture, Forestry and Fishing	9.2	8.9	8.2	-1.1	-0.8	-11.4	-8.4
Manufacturing	8.3	6.5	7.1	-1.3	0.6	-15.1	9.3
Communication Services	0.7	1.5	0.6	-0.2	-1.0	-21.4	-63.3
Electricity, Gas and Water Supply	n/a	0.2	0.3	n/a	0.1	n/a	50.0
Total: All Industries	124.1	130.9	139.8	15.7	8.9	12.6	6.8

7.3.7 Occupational employment growth and decline

Recent occupational employment trends provide a useful indication of current demand (see Table 7.20). The 1997-2000 period has been chosen as South Australian employment growth was sustained during most of this period. Overall growth was strongest in low to medium skill occupations. Disturbingly around 94 percent of the growth was in male employment. Relatively slow or no growth was experienced in high skill professional occupations while employment losses were experienced in a number of low and high skill occupations. Occupational employment grew by 4.2 percent or 15,450 for males and by 0.3 percent or 850 for females over the period.

Much of the occupational growth over the 1997-2000 period is related to particular industry sectors which are now likely to experience much slower employment growth or indeed contraction. These sectors include wine which invested heavily in new plantings recently but is unlikely to sustain such strong employment growth over the next few years and residential construction which has grown steadily but is now poised to enter a mild cyclical downturn resulting in employment losses. The completion of large scale construction projects including the Adelaide Hills Freeway extension and Roxby Downs expansion are also of note in relation to demand for engineering and construction related skills. These sectors are traditionally male dominated sectors and so any slowing down or contraction of employment is likely to have serious negative consequences for male employment prospects

in South Australia. Strong growth in horticultural employment is likely to be sustained on the back of success in the exporting of fresh and processed food exports.

The occupations that experienced the strongest growth over the 1997-2000 period include Intermediate Sales and Related Workers (44 percent), Other Associate Professionals (43 percent), Business and Administration Associate Professionals (39 percent), Intermediate Plant Operators (34 percent), Other Advanced Clerical and Service Workers (34 percent), Construction Tradespersons (28 percent), Business and Information Professionals (26 percent), Other Labourers and Related Workers (18 percent), Elementary and Service Workers (14 percent) and Skilled Agricultural and Horticultural Workers (14 percent).

Occupations experiencing a significant decline in employment include Farmers and Farm Managers (26 percent), Elementary Clerks (26 percent), Specialist Managers (25 percent), Electrical and Electronics Tradespersons (21 percent), Secretaries and Personal Assistants (16 percent), Road and Transport Drivers (13 percent), Other Tradespersons and Related Workers (7 percent), Intermediate Clerical Workers (6 percent), Intermediate Service Workers (6 percent) and Science, Building and Engineering Professionals (5 percent).

There has been steady growth in male occupational employment over the 1997-2000 period (see Table 7.21). This growth has been concentrated largely in the skilled and associate professional occupational areas.

Over the period male employment increased by 4.2 percent. The occupations to experience the strongest growth include Secretaries and Personal Assistants (100 percent - from a very low base), Intermediate Machine Operators (38 percent), Intermediate Plant Operators (37 percent), Business and Information Professionals (35 percent), Intermediate Sales and Related Workers (35 percent), Business Administration and Associate Professionals (31 percent), Other Advanced Clerical and Service Workers (30 percent), Construction Tradespersons (30 percent), Elementary Service Workers (27 percent), Other Associate Professionals (26 percent), Cleaners (22 percent), Education Professionals (19 percent), Other Labourers and Related Workers (15 percent), Social, Arts and Misc Professionals (15 percent), Skilled Agricultural and Horticultural Workers (13 percent) and Science, Engineering and Related Associate Professionals (11 percent).

The occupational areas to experience a decline in employment include Specialist Managers (-30 percent), Elementary Clerks (-28 percent), Health and Welfare Associate Professionals (-26 percent), Electrical and Electronics Tradespersons (-21 percent), Farmers and Farm Managers (20 percent), Health Professionals (-14 percent), Road and Rail Transport Drivers (12 percent) and Intermediate Clerical Workers (8 percent).

Female occupational employment grew slowly over the 1997-2000 period (see Table 7.21). Overall employment grew by just 0.3 percent over the period. The occupations to experience the most significant growth include Other Associate Professionals (108 percent), Electrical and Electronics Tradespersons (100 percent - from a very low base), Intermediate Sales and Related Workers (68 percent), Business Administration Associate Professionals (50 percent), Other Advanced Clerical and Service Workers (33 percent), Other Labourers and Related Workers (27 percent), Health and Welfare Associate Professionals (20 percent), Managing Supervisors (Sales and Service) (18 percent), Skilled Agricultural and Horticultural Workers (16 percent), Social, Arts and Miscellaneous Professionals (12 percent), and Business and Information Professionals (11 percent).

Table 7.20: Employment Change by Occupation (2 Digit ASCO), Persons, Males and Females, 1997-2000

	Persons		·		Males				Females			
	'000s	'000s	Difference ('000s)	Percent change	'000s	'000s	Difference ('000s)	Percent change	'000s	'000s	Difference ('000s)	Percent change
Occupation	1997	2000	1997-2000	1997-2000	1997	2000	1997-2000	1997-2000	1997	2000	1997-2000	1997-200
Intermediate Sales and Related Workers	7.9	11.3	3.5	43.9	5.7	7.6	2.0	34.5	2.2	3.7	1.5	68.2
Other Associate Professionals	6.1	8.7	2.6	42.6	4.9	6.1	1.3	25.8	1.3	2.6	1.4	108.0
Business and Administration Associate Professionals	17.0	23.6	6.6	38.5	9.4	12.2	2.9	30.5	7.7	11.4	3.8	49.0
Intermediate Plant Operators	13.8	18.5	4.7	34.2	13.1	17.9	4.8	36.8	0.7	0.6	-0.1	-14.3
Other Advanced Clerical and Service Workers	11.6	15.5	3.9	33.6	2.2	2.8	0.65	30.2	9.5	12.6	3.2	33.3
Construction Tradespersons	14.6	18.7	4.1	28.2	14.3	18.5	4.2	29.5	0.4	0.1	-0.3	-71.4
Business and Information Professionals	22.7	28.6	6.0	26.3	14.4	19.4	5.0	34.8	8.3	9.2	0.9	10.8
Other Labourers and Related Workers	31.4	37.2	5.8	18.3	23.2	26.8	3.6	15.5	8.2	10.4	2.2	26.8
Elementary Service Workers	7.0	8.0	1.0	14.4	4.2	5.3	1.1	26.5	2.8	2.8	0.0	0.0
Social, Arts and Miscellaneous Professionals	17.1	19.5	2.4	14.1	10.0	11.5	1.5	15.0	7.1	7.9	0.9	12.1
Skilled Agricultural and Horticultural Workers	6.8	7.7	0.9	13.2	5.9	6.6	0.8	12.8	1.0	1.1	0.2	15.8
Managing Supervisors (Sales and Service)	26.7	30.1	3.4	12.7	15.9	17.3	1.4	8.5	10.9	12.9	2.0	18.4
Generalist Managers	8.3	9.0	0.7	7.8	7.4	8.0	0.6	8.2	1.1	1.1	0.0	0.0
Health and Welfare Associate Professionals	5.3	5.7	0.4	7.5	1.6	1.2	-0.4	-25.8	3.8	4.5	0.8	20.0
Intermediate Machine Operators	6.7	7.2	0.5	7.5	3.6	5.0	1.4	37.5	3.1	2.2	-0.9	-27.9
Cleaners	17.3	18.2	0.9	5.2	4.7	5.8	1.1	22.3	12.6	12.5	-0.2	-1.2
Science, Engineering and Related Associate Professionals	9.7	10.2	0.5	4.6	7.1	7.9	0.8	11.3	2.6	2.3	-0.3	-9.8
Mechanical and Fabrication Engineering Tradespersons	17.5	18.0	0.5	2.9	17.2	17.7	0.6	3.2	0.3	0.3	0.0	0.0
Factory Labourers	25.2	25.7	0.6	2.2	16.7	16.8	0.2	0.9	8.5	8.9	0.4	4.1
Education Professionals	28.7	29.1	0.4	1.2	10.6	12.6	2.0	19.0	18.2	16.5	-1.7	-9.1
Elementary Sales Workers	50.2	50.5	0.3	0.6	14.0	14.7	0.7	4.6	36.2	35.9	-0.4	-1.0
Food Tradespersons	7.7	7.7	0.0	0.0	5.0	5.1	0.1	1.0	2.7	2.7	-0.1	-1.9
Health Professionals	23.4	23.2	-0.2	-0.9	6.7	5.8	-1.0	-14.2	16.7	17.5	0.8	4.5
Other Intermediate Production and Transport Workers	17.5	17.2	-0.3	-1.7	14.0	14.2	0.2	1.4	3.5	3.0	-0.5	-14.3
Automotive Tradespersons	10.6	10.3	-0.4	-3.3	10.6	9.9	-0.7	-6.6	n/a	0.4	n/a	n/a
Science, Building and Engineering Professionals	11.5	10.9	-0.6	-5.2	9.3	9.2	-0.2	-1.6	2.2	1.7	-0.5	-20.9
Intermediate Service Workers	41.2	38.8	-2.4	-5.7	7.8	7.8	-0.1	-0.6	33.4	31.1	-2.3	-6.7
Intermediate Clerical Workers	60.8	57.1	-3.7	-6.1	16.1	14.9	-1.2	-7.5	44.7	42.2	-2.5	-5.6
Other Tradespersons and Related Workers	17.9	16.7	-1.2	-6.7	11.3	9.9	-1.4	-12.4	6.7	6.9	0.2	3.0
Road and Rail Transport Drivers	21.2	18.5	-2.7	-12.8	20.3	17.8	-2.5	-12.3	0.9	0.7	-0.3	-27.8
Secretaries and Personal Assistants	15.2	12.7	-2.5	-16.2	0.1	0.2	0.1	100.0	15.1	12.6	-2.5	-16.3
Electrical and Electronics Tradespersons	14.4	11.4	-3.1	-21.2	14.3	11.3	-3.1	-21.3	0.1	0.2	0.1	100.0
Specialist Managers	21.9	16.4	-5.5	-24.9	17.6	12.4	-5.2	-29.6	4.3	4.1	-0.3	-5.8
Elementary Clerks	7.3	5.4	-1.9	-25.5	2.7	2.0	-0.8	-27.8	4.6	3.4	-1.2	-25.3
Farmers and Farm Managers	33.6	25.0	-8.7	-25.7	23.8	18.9	-4.9	-20.4	9.9	6.1	-3.9	-38.9
Total: All Occupations	654.9	671.3	16.4	2.5	364.6	380.1	15.5	4.2	290.4	291.2	0.9	0.3

Table 7.21: Employment Change by Occupation, Full-time and Part-time, Males and Females, 1997-2000

February-May average Managers and Administrators Males Professionals Males Females Associate Professionals Males Tradespersons and Related Workers Males Advanced Clerical and Service Workers Males Intermediate Clerical, Sales and Service Males Workers Females Females Females	Full-time Part-time Total Full-time Part-time	1997 45.7 3.0 48.6 9.5 5.8 15.2 46.4 4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	2000 36.8 2.4 39.2 7.1 4.1 11.2 51.6 6.7 58.4 36.1 16.7 52.8 41.3	1997-2000 -8.9 -0.6 -9.4 -2.4 -1.7 -4.1 5.3 2.2 7.5 0.7 -0.3 0.4	change 1997-2000 -19.4 -18.6 -19.3 -25.4 -28.7 -26.6 11.3 47.3 14.6 2.0 -1.5
Professionals Males Females Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Part-time Total Full-time Total Full-time Part-time	3.0 48.6 9.5 5.8 15.2 46.4 4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	2.4 39.2 7.1 4.1 11.2 51.6 6.7 58.4 36.1 16.7 52.8 41.3	-0.6 -9.4 -2.4 -1.7 -4.1 5.3 2.2 7.5 0.7 -0.3	-18.6 -19.3 -25.4 -28.7 -26.6 11.3 47.3 14.6 2.0 -1.5
Professionals Males Females Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Total Full-time Part-time Total Full-time Part-time Total Full-time Part-time Total Full-time Total Full-time Part-time Total Full-time Total Full-time Full-time Part-time	48.6 9.5 5.8 15.2 46.4 4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	39.2 7.1 4.1 11.2 51.6 6.7 58.4 36.1 16.7 52.8 41.3	-9.4 -2.4 -1.7 -4.1 5.3 2.2 7.5 0.7 -0.3	-19.3 -25.4 -28.7 -26.6 11.3 47.3 14.6 2.0 -1.5
Professionals Males Females Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Full-time Part-time Total Full-time Part-time	9.5 5.8 15.2 46.4 4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	7.1 4.1 11.2 51.6 6.7 58.4 36.1 16.7 52.8 41.3	-2.4 -1.7 -4.1 5.3 2.2 7.5 0.7 -0.3	-25.4 -28.7 -26.6 11.3 47.3 14.6 2.0 -1.5
Professionals Males Females Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Part-time Total Full-time Part-time	5.8 15.2 46.4 4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	4.1 11.2 51.6 6.7 58.4 36.1 16.7 52.8 41.3	-1.7 -4.1 5.3 2.2 7.5 0.7 -0.3	-28.7 -26.6 11.3 47.3 14.6 2.0 -1.5
Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Total Full-time Part-time Total Full-time	15.2 46.4 4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	11.2 51.6 6.7 58.4 36.1 16.7 52.8 41.3	-4.1 5.3 2.2 7.5 0.7 -0.3	-26.6 11.3 47.3 14.6 2.0 -1.5
Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Full-time Part-time Total Full-time	46.4 4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	51.6 6.7 58.4 36.1 16.7 52.8 41.3	5.3 2.2 7.5 0.7 -0.3	11.3 47.3 14.6 2.0 -1.5
Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Part-time Total Full-time	4.6 50.9 35.4 17.0 52.4 36.7 2.1 38.8	6.7 58.4 36.1 16.7 52.8 41.3	2.2 7.5 0.7 -0.3	47.3 14.6 2.0 -1.5
Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Total Full-time Part-time Total Full-time Part-time Total Full-time Part-time Total Full-time Total Full-time	50.9 35.4 17.0 52.4 36.7 2.1 38.8	58.4 36.1 16.7 52.8 41.3	7.5 0.7 -0.3	14.6 2.0 -1.5
Associate Professionals Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Full-time Part-time Total Full-time Part-time Total Full-time Part-time Total Full-time	35.4 17.0 52.4 36.7 2.1 38.8	36.1 16.7 52.8 41.3	0.7 -0.3	2.0 -1.5
Associate Professionals Males Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Part-time Total Full-time Part-time Total Full-time Part-time Total Full-time Total Full-time	17.0 52.4 36.7 2.1 38.8	16.7 52.8 41.3	-0.3	-1.5
Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Total Full-time Part-time Total Full-time Part-time Total Full-time	52.4 36.7 2.1 38.8	52.8 41.3		
Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Full-time Part-time Total Full-time Part-time Total Full-time	36.7 2.1 38.8	41.3	0.4	
Females Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Part-time Total Full-time Part-time Total Full-time	2.1 38.8		U. T	0.8
Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Total Full-time Part-time Total Full-time	38.8	2.4	4.7	12.7
Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Full-time Part-time Total Full-time		3.4	1.3	59.5
Tradespersons and Related Workers Males Females Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Part-time Total Full-time	20.2	44.7	5.9	15.2
Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Total Full-time	20.3	23.1	2.8	13.8
Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Full-time	5.8	10.5	4.7	81.0
Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers		26.1	33.7	7.6	29.2
Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	D 4:	73.0	74.2	1.2	1.6
Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Part-time	5.4	4.7	-0.7	-13.1
Advanced Clerical and Service Workers Males Females Intermediate Clerical, Sales and Service Males Workers	Total	78.4	78.9	0.5	0.6
Females Intermediate Clerical, Sales and Service Males Workers	Full-time	5.5	6.3	0.8	14.5
Females Intermediate Clerical, Sales and Service Males Workers	Part-time	5.5	5.1	-0.4	-7.3
Females Intermediate Clerical, Sales and Service Males Workers	Total	11.0	11.3	0.4	3.2
Intermediate Clerical, Sales and Service Males Workers	Full-time	2.0	2.3	0.3	12.5
Intermediate Clerical, Sales and Service Males Workers	Part-time	0.3	0.7	0.5	180.0
Intermediate Clerical, Sales and Service Males Workers	Total	2.2	3.0	0.8	34.1
Intermediate Clerical, Sales and Service Males Workers	Full-time	13.4	13.0	-0.5	-3.4
Workers	Part-time	11.2	12.3	1.1	9.9
Workers	Total	24.6	25.2	0.7	2.6
Females	Full-time	23.7	25.1	1.5	6.1
Females	Part-time	5.9	5.1	-0.8	-13.7
Females	Total	29.5	30.2	0.7	2.4
	Full-time	37.6	35.8	-1.8	-4.8
	Part-time	42.7	41.2	-1.5	-3.5
	Total	80.3	77.0	-3.3	-4.0
Intermediate Production and Transport Males Workers	Full-time	42.9	47.1	4.2	9.8
	Part-time	7.9	7.7	-0.2	-2.5
	Total	50.8	54.8	4.0	7.9
Females	Full-time	4.8	4.1	-0.7	-13.7
	Part-time	3.4	2.4	-1.0	-29.9
	Total	8.1	6.5	-1.7	-20.4
Elementary Clerical, Sales and Service Males Workers	Full-time	12.7	11.2	-1.6	-12.2
	Part-time	8.2	10.7	2.6	31.3
	Total	20.9	21.9	1.0	4.8
Females	Full-time	13.4	13.0	-0.4	-2.6
	Part-time	30.2	29.0	-1.2	-4.0
	Total	43.5	42.0	-1.5	-3.4
Labourers and Related Workers Males	Full-time	32.3	36.4	4.1	12.7
	Part-time	12.3	13.0	0.7	5.7
	Total	44.6	49.4	4.8	10.7
Females	Full-time	10.4	13.2	2.8	27.1
1 Chiales	Part-time	18.9	18.6	-0.3	-1.6
	Total	29.3	31.7	2.4	8.2
Total: All Occupations Males	Full-time	315.3	325.9	10.6	3.4
- Indies	Part-time	49.35	54.2	4.9	9.8
	I all tillio	364.6	380.1	15.5	4.2
Females	Total	150.2	151.5	1.3	0.9
remaies	Total Full-time	130.4			0.7
	Total Full-time Part-time	140.2	139.8	-0.5	-0.3

The occupations to experience the most significant decline in employment were Construction Tradespersons (-71 percent), Farmers and Farm Managers (-39 percent), Intermediate Machine Operators (-28 percent), Road and Rail Transport Drivers (-25 percent), Elementary Clerks (-21 percent), Secretaries and Personal Assistants (-16 percent), Other Intermediate Production and Transport Workers (-14 percent), Science, Engineering and Related Associate Professionals (-10 percent) and Education Professionals (-9 percent). It should be noted that the decline in numerical terms in a number of these occupations is relatively small.

7.3.8 Public sector employment

Historically public sector employment has been a source of secure and rewarding employment opportunities for many thousands of people in South Australia. Recent downsizing of the public sector in South Australia has eroded the capacity of the public sector as a provider of full-time employment. While similar trends have been evident in other states, it is likely that the scale of public sector jobs losses has been relatively greater in South Australia (Cully, 2000; Spoehr, 1999).

Over the 1990-99 period the state public sector workforce declined by around 25,000 persons, (taking account of the transfer for reporting purposes of university staff from the state to the commonwealth public sector). The state public sectors share of total employment in South Australia declined from around 18 percent in 1990 to 12.7 percent in 1999 (see Table 7.22). The diminished role of the public sector as an employer has significantly reduced the number of secure and rewarding employment opportunities available to South Australians.

Table 7.22: State Public Sector Employment, South Australia, 1986-99, Persons

Source: Commissioner for Public Employment, various

Year	Persons	Persons annual change	As a percent of all persons			
		_	employed in			
			SA			
1987	110122					
1988	108892	-1230				
1989	110476	1584	17.1			
1990	116208	5732	17.7			
1991	115700	-508	18.1			
1992	111025	-4675	17.7			
1993	110781	-244	17.4			
1994	105836	-4945	16.5			
1995	102899	-2937	15.7			
1996	94808	-8091	14.4			
1997	91812	-2996	13.9			
1998	91818	6	14.4			
1999	84199*	-7619	12.7			

^{*} Exclusion of the three universities in the June 1998-99 calculations accounts for the large decrease in state public sector employment. In June 1999 the universities employed around 7036 persons.

In addition to there being fewer public sector employment opportunities available due to downsizing and outsourcing, there has been a decline in the proportion of secure ongoing positions within the state public sector as Figure 7.10 and Table 7.23 indicate. The percentage of ongoing positions within the South Australian public sector declined from 81 percent in 1995 to around 73 percent in 1999. Over the same period the proportion of contract based positions doubled from 9.8 percent to 18 percent of all appointments.

Figure 7.10: Employees in the South Australian Public Sector by Appointment Type, Percent, June 1995 to June 1999

Source: Commissioner for Public Employment, June 1999

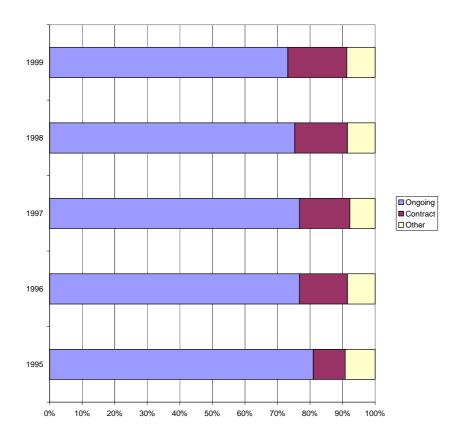


Table 7.23: Employees in the South Australian Public Sector by Appointment Type, Percent, June 1999 to June 1999

Source: Commissioner for Public Employment, June 1999

	Jun-95	Jun-96	Jun-97	Jun-98	Jun-99
Ongoing	81.0	76.7	76.8	75.3	73.2
Contract	9.8	14.7	15.4	16.2	18.1
Other	9.2	8.5	7.8	8.5	8.7

7.3.9 Underemployment

The proportion of part-time employed persons looking for work is an indicator of the level of under-employment in a region. High levels of underemployment in a region act to encourage outward migration in search of additional work. South Australia along with Tasmania has relatively high rates of underemployment. Figure 7.11 and Tables 7.24-7.26 indicate that South Australia consistently records among the highest rates of underemployment in Australia. Around 19 percent of part-time employed females and around 34 percent of males would prefer to have work more hours in 1999. Female and male under-employment is consistently higher in South Australia than all States except Tasmania.

Figure 7.11: Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, All Persons, 1980-99

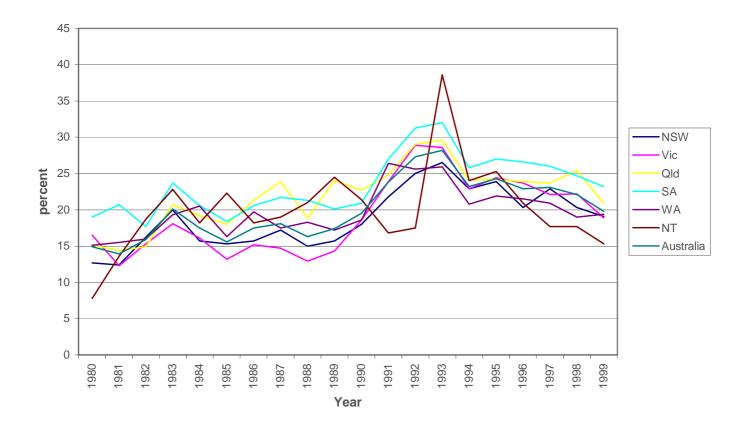


Table 7.24: Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, All Persons, 1980-99

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
NSW	12.7	18.0	21.8	25.0	26.5	22.9	23.9	20.3	22.9	20.3	19.1
Vic	16.5	18.6	23.9	28.9	28.6	22.9	24.4	23.7	22.1	22.2	18.9
Qld	15.2	22.7	24.8	29.0	29.6	24.1	24.2	23.9	23.7	25.4	20.9
SA	19.0	20.9	27.0	31.3	32.0	25.8	27.0	26.6	26.0	24.7	23.2
WA	15.1	18.6	26.4	25.6	25.9	20.8	21.9	21.5	20.9	19.0	19.4
Tas	12.9	22.1	24.8	26.2	29.4	26.4	30.1	29.7	29.4	23.8	23.1
NT	7.8	21.4	16.8	17.5	38.6	24.0	25.3	20.9	17.7	17.7	15.3
ACT	17.1	18.2	15.4	23.9	26.7	22.6	24.0	25.8	25.7	20.5	19.0
Australia	14.9	19.5	23.8	27.3	28.2	23.2	24.3	22.9	23.1	22.1	19.8

Table 7.25: Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, Females, 1980-99

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
NSW	11.2	16.3	18.4	21.7	22.8	17.6	18.8	16.1	19.2	15.8	16.7
Vic	15.1	16.2	19.7	23.8	24.1	18.6	21.4	20.0	18.2	18.6	16.3
Qld	13.4	19.9	21.2	24.3	25.5	20.3	21.0	18.8	20.2	21.1	17.9
SA	17.1	18.1	21.7	27.0	26.3	23.1	22.5	22.7	22.2	22.2	19.0
WA	13.1	16.2	21.7	20.7	21.5	17.5	18.1	16.8	18.4	15.6	16.8
Tas	12.9	17.0	22.5	21.1	23.5	21.1	24.7	24.0	24.9	18.7	20.8
NT	8.7	17.9	13.9	16.6	31.6	19.4	22.2	21.2	15.5	12.9	17.6
ACT	14.6	16.3	12.8	20.7	23.3	19.3	20.1	21.1	21.1	15.5	15.4
Australia	13.4	17.1	19.9	23.0	23.9	18.9	20.4	18.6	19.4	18.1	17.1

Table 7.26: Part-time Employed Persons who Preferred to Work More Hours, as a Proportion of the Total Part-time Employed Persons, Australia, States and Territories, Males, 1980-99

Source: ABS Labour Force Survey, unpublished, Centre for Labour Research

Percent	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
NSW	17.9	23.7	32.0	35.6	37.5	37.8	37.8	31.8	33.2	33.0	25.5
Vic	21.6	27.0	38.1	42.4	41.7	36.2	34.5	33.7	32.8	31.5	26.0
Qld	23.4	31.6	35.3	43.3	41.7	36.3	32.8	38.4	33.6	36.5	30.4
SA	27.9	31.7	45.0	44.6	49.1	35.5	40.0	38.1	36.7	32.2	33.9
WA	23.3	29.4	41.6	40.2	39.4	30.9	34.5	35.5	28.9	29.4	27.0
Tas	12.7	40.6	32.8	44.1	50.8	42.7	46.2	46.4	41.7	38.1	30.4
NT	5.9	29.6	25.5	19.4	52.9	38.1	31.5	20.5	21.9	27.2	10.1
ACT	25.5	23.1	21.8	35.1	36.4	30.1	34.0	37.4	36.1	31.6	25.8
Australia	20.8	27.7	36.0	40.1	41.0	36.2	36.0	34.7	33.2	32.9	27.3

7.3.10 Unemployment

Persistent high unemployment and relatively fewer employment vacancies in South Australia during the 1990s has intensified competition for unemployment, forcing some people to give up the search for work and others to seek work interstate and overseas. Lower employment participation rates indicate a greater number of discouraged job seekers while higher levels of out-migration suggest more people are leaving in search of work.

Figure 7.12 and Table 7.27 indicate that unemployment in South Australia is significantly higher than the nation as a whole and it is the highest of the mainland states. There has been little progress in reducing unemployment in South Australia over the 1990-2000 period. During the early 1990s recession unemployment reached around 11percent in South Australia before falling to 8.2 percent in June 2000. Over the same period unemployment has fallen from around 11.6 percent to 6.6 percent in Australia. Figure 7.13 indicates an increasing divergence between the South Australian and Australian unemployment rates. It appears unlikely that unemployment will fall to levels experienced during previous economic recovery periods. It fell to around 7 percent in 1980 and 1990. In Australia unemployment in June 2000 was slightly above what it was in June 1989 when it reached 6.1 percent. This suggests that the unemployment rate has ratcheted up by around 1 percent in South Australia over the last ten years.

Table 7.28 indicates that male and female unemployment rates in South Australia remain high relative to the nation. At 8.6 percent and 7.6 percent respectively in June 2000 they are around 25 percent higher than the equivalent national unemployment rates. There was a convergence between male and female unemployment rates in South Australia up until the early 1990s when the male unemployment rate began to consistently exceed the female unemployment rate. This reflects large employment losses in male dominated industries the during the 1990s. It also reflects the growth of service sector employment underpinning the increasing participation of women in the labour market.

Table 7.27: Unemployment Rate, Trend, South Australia and Australia, Male, Female and Persons, June 1981-June 2000

Source: ABS Labour Force Surveys, various, cat. no. 6202.0, Centre for Labour Research

		SA			Australia	
	Males	Females	Persons	Males	Females	Persons
Jun-81	7.0	9.3	7.9	4.6	7.3	5.6
Jun-82	7.1	9.2	7.9	5.8	8.1	6.7
Jun-83	11.2	11.2	11.2	10.1	10.6	10.3
Jun-84	9.3	10.0	9.5	8.7	9.5	9.0
Jun-85	8.5	8.9	8.6	8.2	8.7	8.4
Jun-86	8.4	8.5	8.5	7.5	8.6	8.0
Jun-87	8.7	9.6	9.1	7.8	8.7	8.2
Jun-88	8.8	8.8	8.8	6.9	8	7.3
Jun-89	7.5	7.2	7.3	5.7	6.8	6.1
Jun-90	7.2	7.5	7.3	6.5	7.0	6.7
Jun-91	10.5	9.2	10.0	10.0	9.2	9.7
Jun-92	13.2	10.3	12.0	11.4	10.1	10.9
Jun-93	11.9	9.1	10.7	11.6	9.9	10.9
Jun-94	11	10.2	10.7	10.0	9.4	9.8
Jun-95	10.9	8.6	10.1	8.8	7.8	8.1
Jun-96	10.0	8.5	9.4	8.8	8.3	8.6
Jun-97	10.5	8.8	9.8	8.9	8.4	8.7
Jun-98	10.4	9.8	10.1	8.3	7.8	8.1
Jun-99	8.3	8.2	8.3	7.3	7.2	7.2
Jun-00	8.6	7.6	8.2	6.6	6.5	6.6

Figure 7.12: Unemployment Rate, Trend, South Australia and Australia, Males and Females, June 1981-June 2000

Source: ABS Labour Force Survey, various, cat. no. 6202.0, Centre for Labour Research



Male and female unemployment rates for the nation have remained relatively similar over the 1990-2000 period. This suggests that South Australia's dependence upon industries which have experienced relatively higher job losses or higher productivity increases is a major cause of the ratcheting up of unemployment in South Australia.

Figure 7.13: Unemployment Rate, Trend, South Australia and Australia, June 1981-June 2000

Source: ABS Labour Force Surveys, various, cat. no. 6202.0, Centre for Labour Research

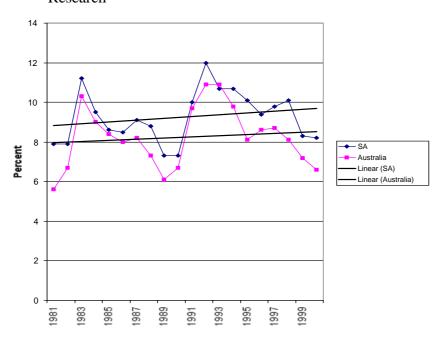


Table 7.28: Unemployment Rate, Australia and States, June 1980 to June 2000

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT A	Australia
Jun-80	5.5	6.0	6.9	8.1	6.1	6.1	2.1	6.6	5.9
Jun-90	6.1	5.2	7.8	6.8	7.6	9.2	6.1	4.9	6.7
Jun-91	7.9	9.8	9.2	9.1	10.4	11.2	6.7	5.9	8.8
Jun-92	9.9	11.4	10.7	11.7	10.2	12.0	6.1	7.5	10.0
Jun-93	10.5	12.0	10.3	10.4	8.7	12.9	7.6	7.2	10.0
Jun-94	9.6	10.4	9.1	10.6	8.4	10.2	6.0	6.3	8.8
Jun-95	7.3	8.4	8.7	9.9	6.9	9.6	6.2	6.4	7.9
Jun-96	7.4	7.8	9.2	8.5	7.8	10.5	4.5	7.4	7.9
Jun-97	7.3	8.9	8.7	9.3	7.0	10.7	5.3	7.3	8.1
Jun-98	7.2	8.0	8.6	9.6	7.1	10.4	4.1	5.9	7.6
Jun-99	6.1	7.1	7.9	7.8	6.3	9.4	3.8	4.9	6.7
Jun-00	5.5	6.2	7.4	7.7	5.8	9.2	5.0	5.1	6.5

7.4 AGE PROFILE OF THE SOUTH AUSTRALIAN WORKFORCE

7.4.1 Introduction

This section examines changes in the age profile of employment in South Australia. A review of broad trends over the 1986-96 period is undertaken before providing a detailed and more current analysis of the age profile of industries and occupations.

Acting to offset some of the forces driving migration from South Australia are important demographic changes taking place in the South Australian workforce. Like the population as a whole the South Australian workforce is ageing. This is particularly so in a range of skilled occupations. The ageing of the South Australian workforce is likely to be a key source of demand for employment over the next five to ten years. If employers replace retiring employees a large proportion of this employment is likely to be full-time and relatively well paid managerial, professional and trades related positions. The availability of a greater number of relatively high paid skilled positions would make South Australia a much more attractive place to live.

An examination of ABS Census data indicates that there was a growing proportion of men and women aged 45-59 in employment in 1996 compared with 1986. Figures 7.14 and 7.15 below illustrate this trend with the upper age bars of the pyramid bulging in 1996. Large numbers of people in the middle age groups in 1986 are now approaching retirement. In 1996 there were around 55 percent more 45-49 year olds and 36 percent more 50-54 year olds than there were in 1986 (see Table 7.29). These changes are much more pronounced among women than men indicating a significant increase in the proportion of women approaching retirement in 1996. There were around 80 percent more 45-49 and 67 percent more 50-54 year old women in 1996 then there were in 1986. As a consequence of these changes there is likely to be significantly more women approaching retirement over the next few years than has been the case in the recent past. In 1996 there were around 34,000 50-59 year old women compared with just 23,000 in 1986. This is in part a reflection of increasing participation of women in the labour market.

While an increase in the number of women retiring will create employment opportunities in the future, and many of these are likely to be taken up by women, a large proportion of the jobs will be part-time and casual given the disproportionate number of women currently working part-time and casual. The retirement of men on the other hand is likely to result in a larger proportion of full-time jobs. Where these jobs are in managerial and professional areas, particularly in service industries, a share of them are likely to secured by women.

An examination of the age profile of employment for the 1999-2000 financial year indicates that there is a large proportion of employees over the age of 55 in a range of industries. As this group of people retire over the next five to ten years a wide range of employment opportunities will emerge. It is important that more detailed research be undertaken on the changing age profile of employment in South Australia to gauge more precisely the number of positions which will become available as employees retire. The following summary of the age profile of employment should be regarded as indicative rather than definitive.

Figure 7.14: Employment by Age, South Australia, Males and Females, 000s, 1986

Source: ABS Census, Centre for Labour Research

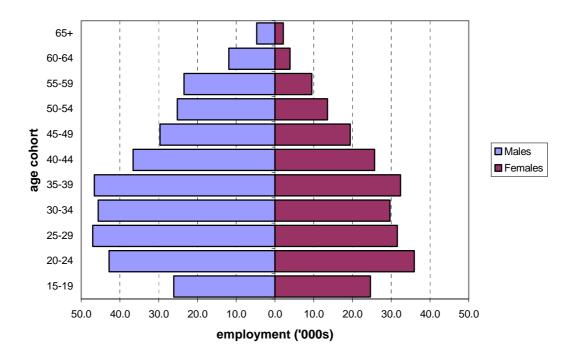


Figure 7.15: Employment by Age, South Australia, Males and Females, 000s, 1996

Source: ABS Census, Centre for Labour Research

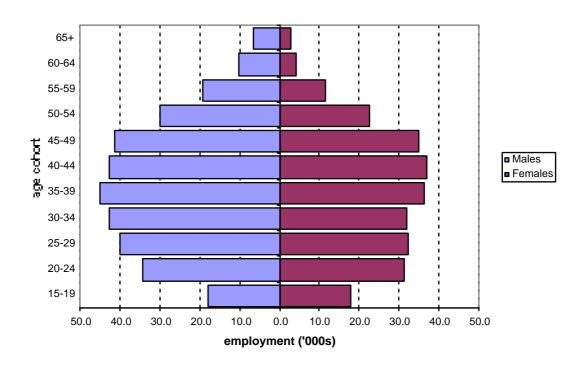


Table 7.29: Employment by Age, Males and Females, South Australia, 1986-96

Source: ABS Census, Centre for Labour Research

		Males			Females			Total	
Age Cohort	1986	1996	% change 86-96	1986	1996	% change 86-96	1986	1996	% change 86-96
15-19	26095	17917	-31.3	24595	18030	-26.7	50690	35947	-29.1
20-24	42787	34232	-20.0	35942	31381	-12.7	78729	65613	-16.7
25-29	47039	39940	-15.1	31595	32160	1.8	78634	72100	-8.3
30-34	45637	42623	-6.6	29701	31869	7.3	75338	74492	-1.1
35-39	46608	45030	-3.4	32411	36289	12.0	79019	81319	2.9
40-44	36576	42504	16.2	25721	36894	43.4	62297	79398	27.5
45-49	29694	41252	38.9	19441	35067	80.4	49135	76319	55.3
50-54	25204	29983	19.0	13527	22590	67.0	38731	52573	35.7
55-59	23486	19368	-17.5	9507	11705	23.1	32993	31073	-5.8
60-64	11921	10232	-14.2	3891	4233	8.8	15812	14465	-8.5
65+	4752	6381	34.3	2161	2827	30.8	6913	9208	33.2

7.4.2 Age profile by industry

Figure 7.16 and Table 7.30 indicate that currently around 12 percent or 63,500 employed people are over the age of 55. Of these around 14,800 are aged 60-64 and 11,400 are 65 and over. This suggests that around 26,000 employees are likely to retire over the next few years. A significant proportion of these employees are likely to be replaced, generating considerable demand for employment within the South Australian labour market.

The broad industry categories with the highest proportions of employees over the age of 55 include Agriculture, Forestry and Fishing (23 percent - 10,900), Cultural and Recreational Services (13 percent - 1,700), Construction (13 percent - 5,800), Transport and Storage (12 percent - 3,100), Wholesale Trade (12 percent - 3,900), Communication Services (12 percent - 1,400), Education (11 percent - 5,600), Manufacturing (10 percent - 10,000) and Health and Community Services (10 percent - 7,100).

The industry categories with the highest numbers of employees over the age of 60 include Agriculture, Forestry and Fishing (7,000), Manufacturing (3,100), Health and Community Services (3,100), Education (2,000), Wholesale Trade (1,700) and Construction (1,600).

It is interesting to note those industries with relatively low proportions of employees under the age of 35 as this suggests relatively low recruitment rates of younger age cohorts within the industry. These include Education (26 percent), Transport and Storage (32 percent), Health and Community Services (32 percent), Agriculture, Forestry and Fishing (31 percent) and Electricity, Gas and Water (31 percent).

A detailed 2 digit industry sector breakdown is provided in Figure 7.17 and Table 7.31 at the end of this section.

Figure 7.16: South Australian Industry by Proportion of Employees by Age Groups, 1999-2000 Financial Year

Source: ABS Labour Force Survey, Centre for Labour Research

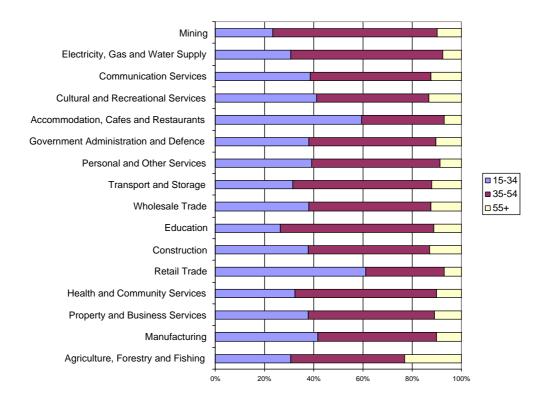


Table 7.30: Employment by Industry and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees

	15-44	45-54	55-59	60-64	65 and over	Total	55+	% of total less than 35	% of total over 55
Agriculture, Forestry and	25.8	10.4	3.9	1.9	5.1	47.1	10.9	30.5	23.1
Fishing Cultural and Recreational Services	8.6	2.6	1.0	0.5	0.2	12.9	1.7	41.0	13.1
Construction	28.7	10.5	4.2	1.2	0.4	45	5.8	37.7	12.8
Wholesale Trade	20.6	6.9	2.2	1.3	0.4	31.4	3.9	37.8	12.4
Communication Services	7.1	2.9	1.1	0.3	0	11.4	1.4	38.5	12.2
Transport and Storage	15.9	6.7	1.9	0.9	0.3	25.7	3.1	31.5	12.06
Education	27.3	17.2	3.6	1.4	0.6	50.1	5.6	26.3	11.1
Property and Business Services	43.6	15.5	4.6	1.4	1.2	66.3	7.2	37.7	10.8
Manufacturing	67.6	20.0	6.9	1.9	1.2	97.6	10	41.8	10.2
Health and Community Services	44.0	19.4	4.1	2.2	0.9	70.6	7.2	32.4	10.1
Mining	1.2	1.5	0.2	0.1	0.0	3.0	0.3	50.0	10.0
Personal and Other Services	19.6	8.3	1.5	0.8	0.4	30.6	2.7	39.2	8.8
Electricity, Gas and Water Supply	2.5	2.3	0.4	0.0	0.0	5.2	0.4	30.7	7.6
Accommodation, Cafes and Restaurants	24.9	5.0	1.0	0.7	0.6	32.2	2.3	59.3	7.1
Finance and Insurance	15.3	4.5	0.7	0.2	0.1	20.8	1.0	41.8	4.8
Total	352.7	133.7	37.3	14.8	11.4	549.9	63.5	576.2	166.16

Figure 7.17: Employment by 2 Digit Industry and Age, Selected Industries, South Australia, 1999-2000 Financial Year Average

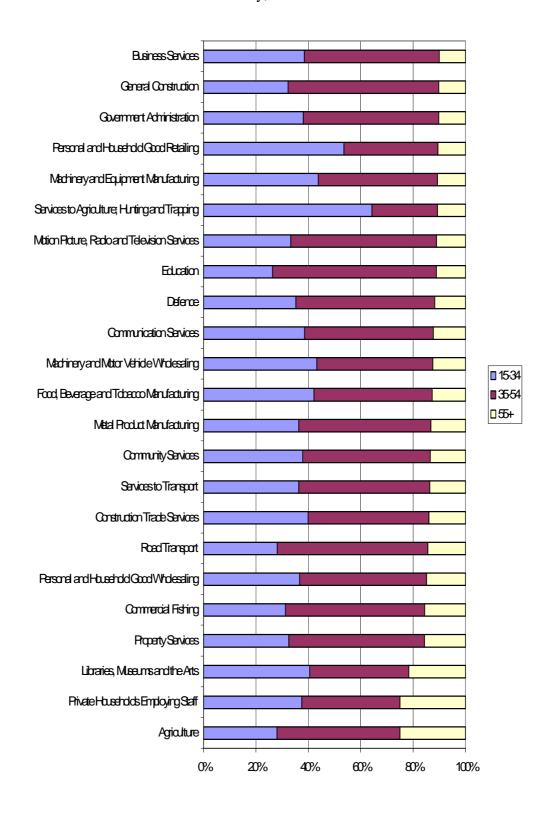


Table 7.31: Employment by 2 Digit Industry and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees and Selected Proportions

	15-34	35-54	55+	Total	% 35-	% 55+	Over 55 as % of under 35
Agriculture	11.2	18.8	10.0	40.0	28.0	25.0	89.3
Private Households Employing Staff	0.3	0.3	0.2	0.8	37.5	25.0	66.7
Libraries, Museums and the Arts	1.5	1.4	0.8	3.7	40.5	21.6	53.3
Property Services	2.7	4.3	1.3	8.3	32.5	15.7	48.4
Commercial Fishing	1.0	1.7	0.5	3.2	31.3	15.6	50.0
Personal and Household Good Wholesaling	4.7	6.2	1.9	12.8	36.7	14.8	40.4
Road Transport	4.3	8.8	2.2	15.3	28.1	14.4	51.2
Construction Trade Services	12.9	14.9	4.5	32.3	39.9	13.9	34.9
Services to Transport	1.6	2.2	0.6	4.4	36.4	13.6	37.5
Community Services	5.6	7.2	2.0	14.8	37.8	13.5	35.7
Metal Product Manufacturing	4.4	6.1	1.6	12.1	36.4	13.2	36.4
Food, Beverage and Tobacco Manufacturing	7.3	7.8	2.2	17.3	42.2	12.7	30.1
Machinery and Motor Vehicle Wholesaling	4.5	4.6	1.3	10.4	43.3	12.5	28.9
Communication Services	4.4	5.6	1.4	11.4	38.6	12.3	31.8
Defence	0.6	0.9	0.2	1.7	35.3	11.8	33.3
Education	13.2	31.3	5.6	50.1	26.4	11.2	42.4
Motion Picture, Radio and Television Services	0.6	1.0	0.2	1.8	33.3	11.1	33.3
Services to Agriculture; Hunting and Trapping	1.8	0.7	0.3	2.8	64.3	10.7	16.7
Machinery and Equipment Manufacturing	13.1	13.6	3.2	29.9	43.8	10.7	24.4
Personal and Household Good Retailing	20.8	13.9	4.1	38.8	53.6	10.6	19.7
Government Administration	8.9	12.1	2.4	23.4	38.0	10.3	27.0
General Construction	4.1	7.3	1.3	12.7	32.3	10.2	31.7
Business Services	22.3	29.8	5.8	57.9	38.5	10.0	26.0
Petroleum, Coal, Chemical and Associated Product Manufacturing	2.7	4.6	0.8	8.1	33.3	9.9	29.6
Sport and Recreation	3.1	3.5	0.7	7.3	42.5	9.6	22.6
Health Services	17.2	33.3	5.2	55.7	30.9	9.3	30.3
Other Services	4	10.7	1.5	16.2	24.7	9.3	37.5
Non-Metallic Mineral Product Manufacturing	1.7	2.4	0.4	4.5	37.8	8.9	23.5
Printing, Publishing and Recorded Media	2.4	3.8	0.6	6.8	35.3	8.8	25.0
Basic Material Wholesaling	2.8	4.8	0.7	8.3	33.7	8.4	25.0
Electricity and Gas Supply	1.1	2.2	0.3	3.6	30.6	8.3	27.3
Textile, Clothing, Footwear and Leather Manufacturing Personal Services	1.7 7.6	3.0 4.9	0.4	5.1 13.5	33.3 56.3	7.8 7.4	23.5 13.2
Accommodation, Cafes and Restaurants	19.1	10.8	2.3	32.2	59.3	7.4	12.0
Other Manufacturing	3.3	2.4	0.4	6.1	54.1	6.6	12.0
Wood and Paper Product Manufacturing	4.1	3.1	0.4	7.7	53.3	6.5	12.1
Water Supply, Sewerage and Drainage Services	0.5	1.0	0.3	1.6	31.3	6.3	20.0
Services to Finance and Insurance	1.7	3.2	0.1	5.2	32.7	5.8	17.7
Finance	5.7	6.4	0.5	12.7	44.9	4.7	10.5
Motor Vehicle Retailing and Services	9.3	8.4	0.8	18.5	50.3	4.7	8.6
Food Retailing	27.2	7.7	1.4	36.3	74.9	3.9	5.2
Insurance	1.2				74.9 44.4	3.9	
	1.2	1.4	0.1	2.7	38.7	3.7	8.3
Storage Forestry and Logging	0.3	1.8 0.5	0.1	3.1 0.8	38.7 37.5	0.0	8.3 0.0

7.4.3 Age profile by occupation

Table 7.32 and Figure 7.18 provide an overview of the age profile of employees by broad occupational category. Differences in the totals are due to the methods used by the ABS to weight the South Australian sample used in the ABS Labour Force Survey.

The occupational categories with the largest proportion of people over the age of 55 include Managers and Administrators (23 percent - 11,600), Advanced Clerical and Service Workers (12 percent - 3,500), Intermediate Production and Transport Workers (11 percent - 6,900), Associate Professionals (11 percent - 8,500) and Professionals (11 percent - 11,800).

The occupational categories with the largest numbers of people over the age of 60 are likely to require post-school qualifications and high levels of skill and experience. They include Managers and Administrators (6,700) Professionals (5,000) and Associate Professionals (3,100). There are also a significant number of employees in semi-skilled and trades based occupational categories over the age of 60 including Tradespersons and Related Workers (2,900) and in the lower skill categories including Labourers and Related Workers (4,000) and Intermediate Clerical, Sales and Service Workers (2,500).

A detailed 2 digit occupational category breakdown is provided in Figure 7.19 and Table 7.33 at the end of this section.

Table 7.32: Employment by Occupation and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees

	15-44	45-54	55-59	60-64	65 and	Total	55+	% of	% of total
					over			total less	over 55
								than 35	
Managers and Administrators	23.5	14.9	4.9	1.9	4.8	50	11.6	15.2	23.2
Advanced Clerical and Service	16.2	8.7	2.2	0.6	0.7	28.4	3.5	33.4	12.3
Workers									
Intermediate Production and	41.7	12.5	4.9	1.6	0.4	61.1	6.9	42.5	11.2
Transport Workers									
Associate Professionals	45.1	22.3	5.4	1.6	1.5	75.9	8.5	30.4	11.1
Professionals	67.0	31.3	6.8	3.1	1.9	110.1	11.8	32.4	10.7
Intermediate Clerical, Sales and	75.8	21.4	7.4	2.3	0.4	107.3	10.1	45.3	9.4
Service Workers									
Labourers and Related Workers	58.5	16.3	3.9	2.4	1.4	82.5	7.7	48.8	9.3
Tradespersons and Related Workers	64.4	16.4	4.8	2.2	0.7	88.5	7.7	45.8	8.7
Elementary Clerical, Sales and	50.9	9.4	2.1	1.7	0.8	64.9	4.6	62.0	7.1
Service Workers									
Total	443.1	153.2	42.4	17.4	12.6	668.7	72.4	355.8	103.0

Table 7.33: Employment by Occupation and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees and Selected Proportions

	15-34	35-54	55+	Total	% 34 -	% 55 +	Proportion of 55+ as % of 15-34
Farmers and Farm Managers	3.9	13.0	7.7	24.6	15.9	31.3	197.4
Generalist Managers	1.3	6.2	1.6	9.1	14.3	17.6	123.1
Specialist Managers	2.5	11.5	2.4	16.4	15.2	14.6	96.0
Managing Supervisors (Sales and Service)	9.2	16.6	4.6	30.4	30.3	15.1	50.0
Road and Rail Transport Drivers	5.5	10.9	2.6	19.0	29.0	13.7	47.3
Other Advanced Clerical and Service Workers	4.7	8.1	2.1	14.9	31.5	14.1	44.7
Social, Arts and Miscellaneous Professionals	5.6	11.5	2.5	19.6	28.6	12.8	44.6
Intermediate Plant Operators	6.2	7.0	2.7	15.9	39.0	17.0	43.6
Education Professionals	8.3	18.0	3.6	29.9	27.8	12.0	43.4
Cleaners	5.2	10.9	2.2	18.3	28.4	12.0	42.3
Business and Administration Associate Professionals	6.8	12.4	2.4	21.6	31.5	11.1	35.3
Elementary Clerks	2.3	2.5	0.8	5.6	41.1	14.3	34.8
Science, Engineering and Related Associate Professionals	3.1	5.6	1.0	9.7	32.0	10.3	32.3
Science, Building and Engineering Professionals	4.5	5.7	1.4	11.6	38.8	12.1	31.1
Construction Tradespersons	7.3	8.4	2.2	17.9	40.8	12.3	30.1
Intermediate Sales and Related Workers	4.7	5.7	1.4	11.8	39.8	11.9	29.8
Health Professionals	7.4	12.9	2.2	22.5	32.9	9.8	29.7
Skilled Agricultural and Horticultural Workers	2.4	3.8	0.7	6.9	34.8	10.1	29.2
Secretaries and Personal Assistants	4.8	7.3	1.3	13.4	35.8	9.7	27.1
Business and Information Professionals	9.9	14.5	2.3	26.7	37.1	8.6	23.2
Mechanical and Fabrication Engineering Tradespersons	6.9	7.4	1.6	15.9	43.4	10.1	23.2
Food Tradespersons	4.0	3.6	0.9	8.5	47.1	10.6	22.5
Intermediate Clerical Workers	25.1	27.8	5.3	58.2	43.1	9.1	21.1
Electrical and Electronics Tradespersons	5.6	4.4	1.1	11.1	50.5	9.9	19.6
Elementary Service Workers	4.1	3.1	0.8	8.0	51.3	10.0	19.5
Other Labourers and Related Workers	21.1	13.5	3.9	38.5	54.8	10.1	18.5
Intermediate Service Workers	19.0	15.0	3.3	37.3	50.9	8.9	17.4
Other Associate Professionals	2.4	5.3	0.3	8.0	30.0	3.8	12.5
Other Intermediate Production and Transport Workers	11.0	7.2	1.3	19.5	56.4	6.7	11.8
Intermediate Machine Operators	3.4	3.2	0.4	7.0	48.6	5.7	11.8
Health and Welfare Associate Professionals	1.7	4.5	0.2	6.4	26.6	3.1	11.8
Factory Labourers	14.0	10.1	1.6	25.7	54.5	6.2	11.4
Other Tradespersons and Related Workers	9.1	7.6	0.9	17.6	51.7	5.1	9.9
Elementary Sales Workers	33.9	14.3	3.0	51.2	66.2	5.9	8.9
Automotive Tradespersons	5.2	4.9	0.4	10.5	49.5	3.8	7.7

Figure 7.18: Employment by Selected Occupation and Age, South Australia, 1999-2000 Financial Year Average, Selected Age Groups

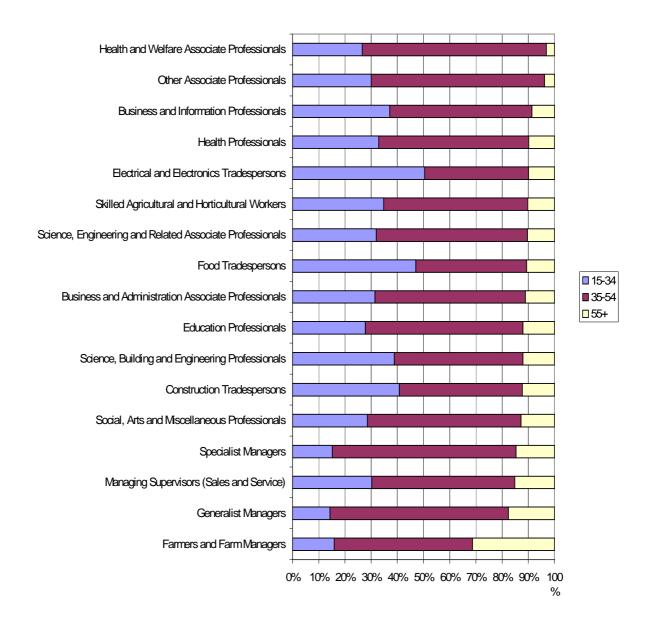
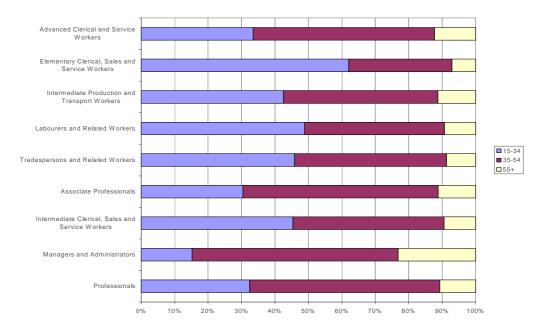


Figure 7.19: Employment by Occupation and Age, South Australia, 1999-2000 Financial Year Average, '000 Employees

Source: ABS Labour Force Survey, Centre for Labour Research



7.4.4 Ageing of the State public sector

Like the South Australian workforce as a whole, the state public sector is ageing (see Table 7.34 and Figure 7.20). As a consequence a large number of employees are likely to retire over the next five to ten years. In the context of a depressed full-time labour market it would be sound public policy to replace rather than backfill positions which fall vacant as the result of the retirement. Managed well this situation will create a wide range of new employment opportunities.

Table 7.34: Employees in the South Australian Public Sector by Age and Gender at June 1999

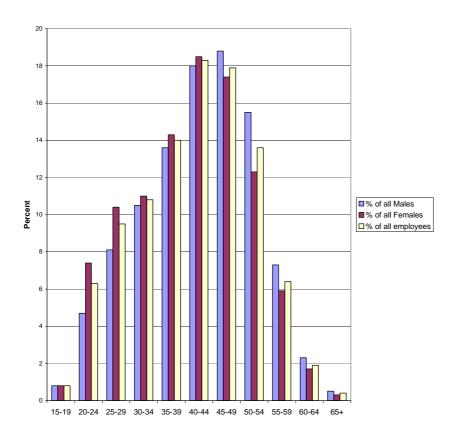
Source: Commissioner for Public Employment

Age group	Male	% of all Males	Female	% of all Females	Total	% of all employees
15-19	255	0.8	421	0.8	676	0.8
20-24	1571	4.7	3769	7.4	5340	6.3
25-29	2704	8.1	5273	10.4	7977	9.5
30-34	3521	10.5	5548	11.0	9069	10.8
35-39	4560	13.6	7253	14.3	11813	14.0
40-44	6036	18.0	9347	18.5	15383	18.3
45-49	6305	18.8	8790	17.4	15095	17.9
50-54	5203	15.5	6238	12.3	11441	13.6
55-59	2437	7.3	2989	5.9	5426	6.4
60-64	771	2.3	858	1.7	1629	1.9
65+	181	0.5	169	0.3	350	0.4
Total	33544	100.0	50655	100.0	84199	100.0
Median age	43.4		41.6		42.3	

There are approximately 7400 people over the age of 55 in the state public sector. Around 3400 of these people are men and 4000 women. Of the total nearly 2000 are over the age of 60.

Figure 7.20: Employees in the South Australian Public Sector by Age and Gender, June 1999

Source: Commissioner for Public Employment



7.5 INCOME AND EMPLOYMENT

7.5.1 Introduction

This section reviews recent trends in South Australian household income and expenditure. In addition trends in average weekly earnings are reviewed. It is likely that significant deterioration in South Australian income levels relative to the nation and other states fuels population outflow. There is considerable evidence indicating a deterioration in South Australian earnings relative to the nation. This section examines some of the available evidence before making a number of conclusions about the strategic implications of the findings.

7.5.2 Household income and expenditure

We can measure change in income and earnings relativities by examining household income/expenditure patterns. While all other mainland states experienced an increase in average household income over the 1991 to 1996 period, South Australia experienced a one percent decline as Table 7.35 and Figure 7.21 indicate.

Table 7.35: Estimated Average Household Income by State and Region in 1996 and Real Change Since 1991

Source: NATSEM, 2000

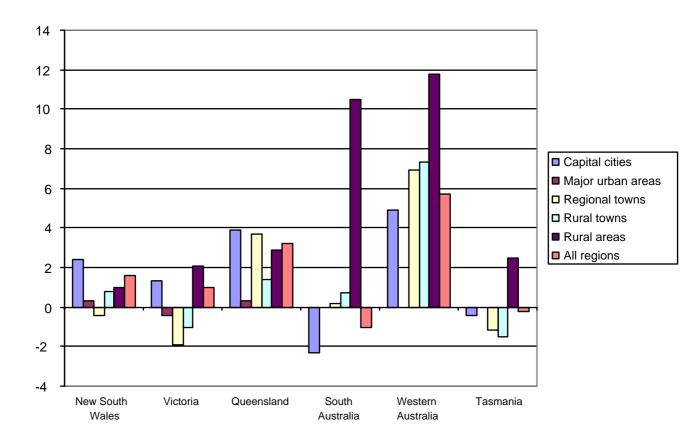
	Capital	Major	Regional	Rural	Rural	All
	cities	urban	towns	towns	areas	regions
		areas				
Average household income						
	\$	\$	\$	\$	\$	\$
New South Wales	49 003	38 044	33 309	30 360	35 232	43 528
Victoria	44 466	35 015	32 186	28 587	36 725	41 363
Queensland	41 898	37 708	36 926	31 646	35 948	38 959
South Australia	37 047		31 333	28 720	35 943	35 868
Western Australia	42 162		42 048	34 286	39 090	41 787
Tasmania	36 408		32 064	30 752	33 586	34 037
Northern Territory	52 856		52 252	39 155	38863	50 227
Australian Capital	54 726				37 469	54 707
Territory						
Dollar change in average he	ousehold incom	e 1991 to 19	96			
	\$	\$	\$	\$	\$	\$
New South Wales	1 129	126	-120	246	341	678
Victoria	592	-127	-619	-295	750	406
Queensland	1 578	98	1 304	442	1 009	1 190
South Australia	-870		47	199	3 415	-362
Western Australia	1 973		2 715	2 319	4 113	2 237
Tasmania	-145		-374	-472	824	-85
Northern Territory	4 280		2 793	-3 489	-909	2 737
Australian Capital	-97				-17 322	-117
Territory						
Percentage change in avera	ge household in	come 1991 t	o 1996			
	%	%	%	%	%	%
New South Wales	2.4	0.3	-0.4	0.8	1.0	1.6
Victoria	1.3	-0.4	-1.9	-1.0	2.1	1.0
Queensland	3.9	0.3	3.7	1.4	2.9	3.2
South Australia	-2.3		0.2	0.7	10.5	-1.0
Western Australia	4.9		6.9	7.3	11.8	5.7
Tasmania	-0.4		-1.2	-1.5	2.5	-0.2
Northern Territory	8.8		5.6	-8.2	-2.3	5.8
Australian Capital	-0.2				-31.6	-0.2
Territory						

In dollar terms this represents a loss to average households of \$362. In contrast incomes in Western Australia increased by \$2,237, in Queensland by \$1,190, in New South Wales by \$678 and in Victoria by \$406. The decline in income in South Australia is largely due to a 2.3 percent drop in household incomes in Adelaide Average household incomes increased marginally in South Australian regional and rural towns and significantly in rural areas.

The significant decline in average household incomes in Adelaide contrasts with substantial increases in all other mainland capital cities. The largest capital city increases were in Darwin (8.8 percent), Perth (4.9 percent), Brisbane (3.9 percent) and Sydney (2.4 percent).

Figure 7.21: Percentage Change in Average Household Income, by State and Region, 1991 to 1996





South Australia has enjoyed a reputation as a relatively low cost state to live in. This asset is likely to be eroded by faster growth in incomes in other states if household expenditure patterns remain relatively static. South Australia's lower rate of growth in average household income may be offset to some extent by lower rates of growth in average household expenditure. On the surface this may indicate that South Australia maintains an advantage as a region with a relatively low cost of living. But lower household expenditure

growth is a double edged sword. It is likely to be a product of declining growth in incomes linked to demographic changes. Recent evidence suggests that South Australia's relatively low household expenditure is due to demographic factors including smaller average household size, an ageing population and a higher proportion of households with pensions and allowances.

The following tables and charts derived from the ABS Household Expenditure Surveys provide a more recent picture on aggregate income and expenditure trends in Australia. Table 7.36 and Figures 7.22 and 7.23 indicate that South Australia experienced relatively low growth in average household income over the 1993-94 to 1998-99 period. South Australia recorded around half the rate of growth experienced in Victoria (24 percent), Western Australia (23 percent) and New South Wales (22 percent). Only Queensland (10 percent) recorded a lower rate of growth than South Australia. Tasmania (18 percent) faired better on this measure than South Australia.

Growth in average household expenditure was significantly lower than growth in average household income in all states and in Australia. South Australia experienced the smallest increase in household expenditure. At 5 percent, South Australia's household expenditure growth is significantly lower than other states and Australia.

Table 7.36: Percentage Increase in Average Household Weekly Expenditure and Average Household Weekly Income, States and Australia, 1993-94 to 1998-99

Source: ABS Household Income and Expenditure Survey

	NSW	Vic	Qld	SA	WA	Tas	Aust
Income	22%	24%	10%	12%	23%	18%	18%
Expenditure	14%	17%	9%	5%	10%	10%	12%

An analysis of the net impact of growth in average household income in dollar terms over the 1993-94 to 1998-99 reveals that South Australia average household income increased by around \$90.00 compared with \$156.00 for Australia as a whole. The greatest dollar increases were in Victoria (\$218.00), Western Australia (\$200.00) and New South Wales (\$162.00) (see Tables 7.37 and 7.41).

An analysis of the net impact of growth in average household expenditure in dollar terms over the 1993-94 to 1998-99 reveals that South Australia average household income expenditure increased by around \$42.00 compared with \$115.00 for Australia as a whole (see Figure 7.24). The largest dollar increases were in Victoria (\$159.00) and New South Wales (\$134.00).

Figure 7.22: Percentage Increase in Average Weekly Household Income by all States, Australia, 1993-94 to 1998-99

Source: ABS Household Income and Expenditure Survey

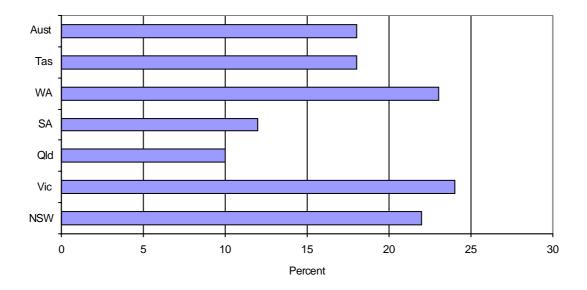


Figure 7.23: Percentage Increase in Average Weekly Household Expenditure by All States, Australia, 1993-94 to 1998-99

Source: ABS Household Income and Expenditure Survey

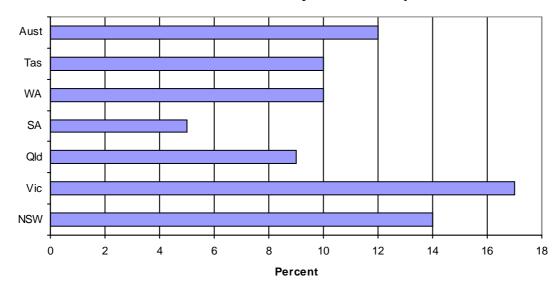


Table 7.37: Average Weekly Household Income by Dollars by All States, Australia, 1993-94 and 1998-99

Source: ABS Household Income and Expenditure Survey

	NSW	Vic	Qld	SA	WA	Tas	Aust
1993-94	\$754.01	\$711.82	\$703.65	\$680.73	\$680.95	\$620.50	\$723.26
1998-99	\$916.78	\$930.76	\$778.53	\$771.07	\$880.99	\$751.95	\$879.22
\$ change	\$162.77	\$218.94	\$74.88	\$90.34	\$200.04	\$131.45	\$155.96

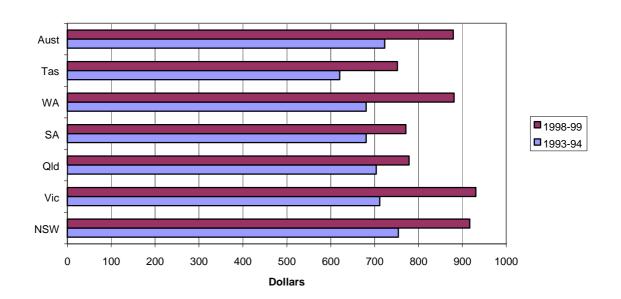
Table 7.38: Average Weekly Household Expenditure by Dollars by All States, Australia, 1993-94 and 1998-99

Source: ABS Household Income and Expenditure Survey

	NSW	Vic	Qld	SA	WA	Tas	Aust
1993-94	\$851.92	\$804.38	\$758.24	\$742.62	\$811.26	\$704.46	\$811.67
1998-99	\$985.51	\$963.43	\$834.44	\$784.27	\$905.77	\$784.56	\$926.35
\$ change	\$133.59	\$159.05	\$76.20	\$41.65	\$94.51	\$80.10	\$114.68

Figure 7.24: Average Weekly Household Income by Dollars by All States, Australia, 1993-94 and 1998-99

Source: ABS Household Income and Expenditure Survey



7.5.3 Average weekly earnings

Historically, low labour costs relative to other states have been regarded as an advantage for South Australia. It has been argued that maintaining a low wage cost regime will promote business investment. In the context of the growing importance of knowledge and skill to successful economic development it would be prudent to re-evaluate this strategy, particularly given evidence of a sustained deterioration in average weekly earnings relative to the nation. It should be noted that significant gender based differences in earnings would emerge if a more complete analysis of earning trends were possible. The existence of a gender pay gap in South Australia has been well

Figure 7.25: Ratio of South Australian to Australian Average Weekly Ordinary Time Earnings, Seasonally Adjusted, Dollars, 1983-2000

Source: ABS catalogue 6302.0 Average Weekly Earnings, States and Australia, various issues

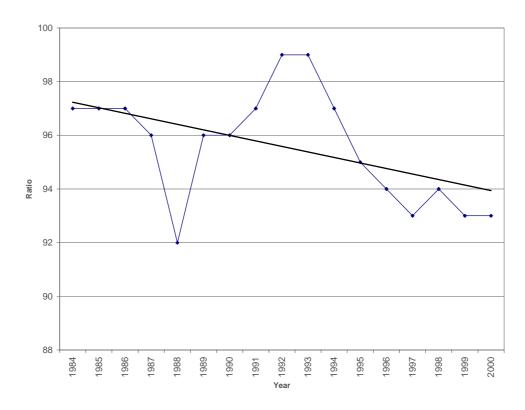


Figure 7.25 and Table 7.39 shows the ratio of South Australian to Australian average weekly ordinary time earnings of full-time adults. After relatively strong growth in the late 1990s the ratio of South Australian AWE to Australian AWE declined steadily over the 1990s as the linear trend in Figure 7.25 indicates. The ratio declined from 99 percent of Australian earnings in 1993 to 93 percent in 2000.

Table 7.39: Ratio of Full-time Adult Ordinary Time Earnings, South Australia by Australia

Source: ABS Cat. No. 6302.0, Average weekly earnings, States and Australia

Year	South Australia full-time adult ordinary	Australia full-time adult ordinary time	Ratio
	time earnings in dollars	earnings in dollars	%
1984	350.7	361.6	97
1985	374.9	386.3	97
1986	402.4	414.9	97
1987	423.1	440.1	96
1988	434.1	469.9	92
1989	482.3	504.7	96
1990	518.5	539.0	96
1991	552.4	568.0	97
1992	580.6	587.3	99
1993	594.2	599.5	99
1994	599.6	619.8	97
1995	615.5	649.5	95
1996	633.0	675.1	94
1997	655.9	702.1	93
1998	690.2	731.6	94
1999	701.7	752.7	93
2000	722.3	773.9	93

7.5.4 Average weekly earnings by industry sector

Reflecting the gap between South Australian and Australian average weekly earnings there are relatively few industry sectors where South Australian employees earn more than Australian employees. In May 2000 South Australian employees earned more on average than Australian employees in only 6 out of 17 industry sectors (see Figure 7.26 and Table 7.40). There was only one sector, Transport and Storage (\$62.00), where South Australians earned significantly more on average than their national counterparts in May 2000. It should be noted that regional variations in earnings in specific industry sectors are likely to be considerably greater when comparing South Australia with the eastern states.

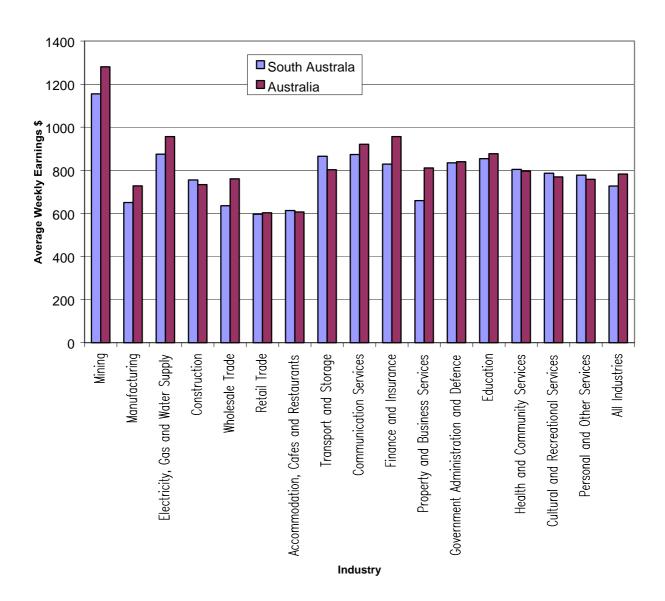
While South Australian average weekly earnings for all industries rose by 21.1 percent over the May 1994 to May 2000 period, they rose by 26.7 percent for Australia as a whole. In May 2000 South Australians were earning on average \$127.00 per week more than they were in May 1994. This compares to \$165.10 more per week for Australians.

The industry sectors with the strongest earnings growth in South Australia over the 1994-2000 period were Government Administration and Defence (42 percent - \$247.00); Accommodation, Cafes and Restaurants (40 percent - \$176.00), Electricity, Gas and Water (40 percent - \$248.10); Mining (34.8 percent - \$298.40); Wholesale Trade (34 percent -

\$161.00), Transport and Storage (27 percent - \$185.00) and Manufacturing (27 percent - \$145.00). The sectors with relatively weak earnings growth include Retail Trade (1.2 percent - \$7.20); Cultural and Recreational Services (3 percent - \$20.80), Finance and Insurance (8 percent - \$61.30), Health and Community Services (14 percent - \$97.80) and Education (15.6 percent - \$115.60). Weaker earnings growth in these sectors is likely to disproportionately impact on women who are overrepresented in sectors with relatively slower earnings growth.

Figure 7.26: Average Weekly Earnings by Industry Sector, South Australia and Australia, Dollars, May 2000

Source: ABS unpublished data, Centre for Labour Research



The growth of earnings of South Australian employees in Retail Trade, Finance and Insurance, Property and Business services and Cultural and Recreational services, Health and Community Services and Education significantly lagged national average weekly earnings growth over the period. Retail Trade earnings remained relatively static in South Australia while they grew strongly nationally over the period, resulting in a convergence of South Australian and national earnings in this sector (see Figures 7.27 and 7.28).

Table 7.40: Average Weekly Earnings by Industry South Australia and Australia by Dollar Difference and Percentage Change, May 1994 to May 2000

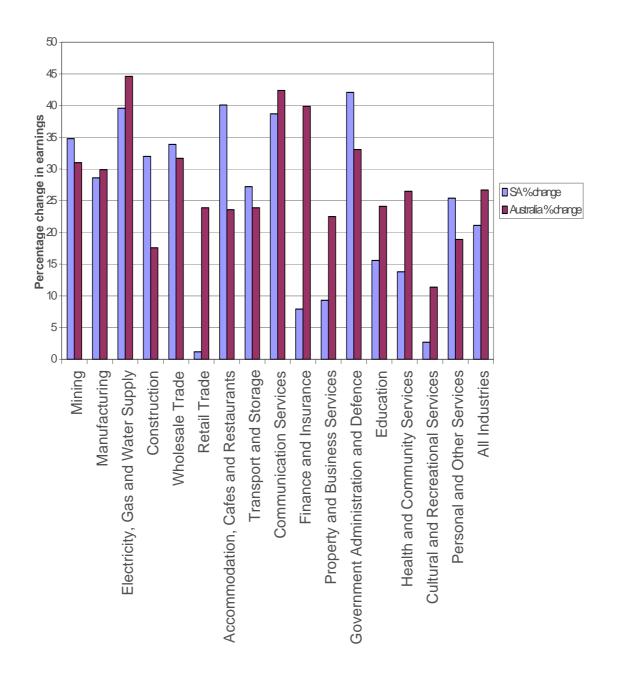
Source: ABS unpublished data, Centre for Labour Research

		South A	Australia			Aust	ralia	
	May	May	\$	%	May	May	\$	%
	1994	2000	difference	change	1994	2000	difference	change
Mining	856.4	1154.8	298.4	34.8	977.3	1280.4	303.1	31.0
Manufacturing	505.9	650.9	145.0	28.6	559.7	727.5	167.8	29.9
Electricity, Gas and	626.4	874.5	248.1	39.6	661.3	956.5	295.2	44.6
Water Supply								
Construction	571.7	755.1	183.4	32.0	623.5	733.8	110.3	17.6
Wholesale Trade	474.6	635.6	161.0	33.9	577.3	760.4	183.1	31.7
Retail Trade	589.3	596.5	7.2	1.2	486.7	603.4	116.7	23.9
Accommodation, Cafes	438.0	613.9	175.9	40.1	490.7	606.6	115.9	23.6
and Restaurants								
Transport and Storage	679.7	864.9	185.2	27.2	647.9	802.9	155.0	23.9
Communication Services	629.4	873.6	244.2	38.7	646.6	920.8	274.2	42.4
Finance and Insurance	767.6	828.9	61.3	7.9	683.6	956.4	272.8	39.9
Property and Business	602.9	659.3	56.4	9.3	661.8	810.7	148.9	22.5
Services								
Government Admin	587.1	834.3	247.2	42.1	630.8	839.6	208.8	33.1
and Defence								
Education	738.7	854.3	115.6	15.6	706.7	877.3	170.6	24.1
Health and Community	706.4	804.2	97.8	13.8	629.1	796.2	167.1	26.5
Services								
Cultural and Recreational	765.5	786.3	20.8	2.7	690.3	769.0	78.7	11.4
Services								
Personal and Other	619.7	777.3	157.6	25.4	637.7	758.2	120.5	18.9
Services								
All Industries	599.8	726.8	127.0	21.1	617.5	782.6	165.1	26.7

In contrast, Accommodation, Cafés and Restaurants; Construction, Transport and Storage; Government, Administration and Defence and Personal and Other Services sectors employees fared better than their national counterparts over the period.

Figure 7.27: Average Weekly Earnings by Industry, South Australia and Australia, All Persons, Percentage Change, May 1994 to May 2000

Source: ABS unpublished data, Centre for Labour Research



350 300 250 Dollar increase 200 SA \$ increase ■ Australia \$ increase 150 100 50 Mining Manufacturing Transport and Storage Electricity, Gas and Water Supply Construction Wholesale Trade Retail Trade Accommodation, Cafes and Restaurants Finance and Insurance Property and Business Services Government Administration and Defence Education Health and Community Services Cultural and Recreational Services Personal and Other Services All Industries Communication Services

Figure 7.28: Increase in Weekly Earnings by Industry, South Australia and Australia, All Persons, May 1994 to May 2000

7.5.5 Conclusion

Low levels of business investment coinciding with a deterioration in average weekly earnings suggest that factors other than labour costs are likely to be the key drivers of business investment in South Australia. Business investment is more likely to be influenced by macro-economic conditions such as trading arrangements, interest rates and the value of the dollar. It is also likely to be significantly influenced by factors which are increasingly central to the growth of knowledge intensive industries such as investments in human capital, research and development, industry collaboration and physical infrastructure. In an economy where the commitment to the pursuit of knowledge and innovation will be among

the keys to maintaining and building prosperity, a low wage cost strategy will impede sustainable growth and long-term prosperity in South Australia. If earnings in South Australia continue to decline relative to the nation there is a serious risk that a low wage regime will fuel the outflow of highly qualified and skilled people. This will erode the knowledge base of the state, undermining the growth of new technology based industries. Such industries require highly skilled employees and are usually prepared to pay relatively high levels of remuneration to attract and retain skilled and experienced people. In this context a divergence between Australian and South Australian average weekly earnings will erode South Australian competitive advantage.

7.6 LABOUR MOBILITY

7.6.1 Introduction

The movement of people from one state to another or overseas for employment related reasons is commonplace. There are a range of reasons for this movement including family or health related factors, a lack of available work at home, career advancement, higher salaries and a desire for greater job security. Regions with slower economic and employment growth and higher unemployment will experience a loss of population to other regions if those regions are able to more easily satisfy differing career advancement and employment security needs.

In addition to the survey results outlined in this report it is possible to obtain an indication of the character and dimensions of people leaving South Australia from the ABS Labour Mobility Survey (LMS). The LMS provides an indication of the number of people who leave South Australia and where they are now employed. Survey results are available for 1994, 1996 and 1998. Caution is warranted in the use of data from the survey as it contains high standard errors due to the small sample sizes¹³ used to derive the results. Accordingly any conclusions derived from the survey should be regarded as indicative only.

7.6.2 How many people are leaving and where are they going?

Table 7.41 and Figure 7.29 indicate that the main destinations for people leaving South Australia for the periods surveyed were New South Wales, Victoria, Queensland and the Northern Territory. The total number of persons leaving varies over time and between region. In 1994 around 9,100 people left, in 1996 it was 14,500 and in 1998 it declined to around 7700. There is considerable doubt however that the downward trend is as significant as the LMS suggests. This is due to the lack of any data in the 1998 survey on those who migrated from South Australia to New South Wales. It is likely that a substantial number of South Australians did leave for New South Wales in the latter half of the 1990s due to the opportunities generated by the Olympics and the relative strength of the New South Wales economy over the period. This would suggest that the numbers leaving South Australia in 1998 were substantially higher than that reported in the LMS. This hypothesis tends to be supported by the fact that the LMS reported a larger number of people leaving South Australia for Victoria in 1998 than in 1996. It is likely that a similar trend applies to New South Wales.

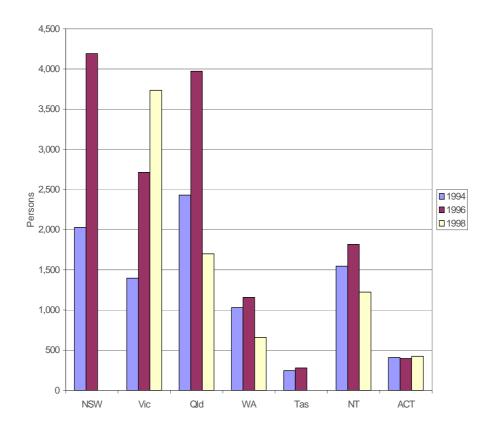
The ABS Labour Force Survey interviews two thirds of one percent and interviews only people aged 18 years and over.

Table 7.41: Persons in the Labour Force Leaving South Australia by Number by State Where Now Employed, 1994-98

1994	1996	1998
2,028	4,192	na
1,397	2,714	3,736
2,432	3,973	1,701
1,030	1,157	660
245	279	0
1,546	1,817	1,222
410	397	424
9,090	14,529	7743
	2,028 1,397 2,432 1,030 245 1,546 410	2,028 4,192 1,397 2,714 2,432 3,973 1,030 1,157 245 279 1,546 1,817 410 397

Figure 7.29: Persons in the Labour Force Leaving South Australia by Number by State Where Now Employed, 1994-98

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research



The number of people leaving South Australia for Victoria increased over the surveyed periods. It also appears that after a significant increase in 1996 there were less people moving to Queensland in 1998. The number of people leaving for Western Australia appears to be in decline while a relatively high numbers of people migrated to the Northern Territory throughout the period.

7.6.3 How many people are coming to South Australia from other parts of Australia?

The LMS indicates that the net loss of people from South Australia to other parts of Australia peaked in mid 1990s and ended in 1998. In 1994 there was a net loss of around 2340 people from South Australia. The loss peaked at 4780 in 1996. Table 7.42 indicates that by 1998 South experienced a net gain of around 2000 people from other parts of Australia. While this appears to represent a significant turnaround it is unlikely to be a true reflection of the actual outcome due to the lack of any data on migration from South Australia to New South Wales in 1998.

Table 7.42: Persons Moving to South Australia From Other Parts of Australia, 1994, 1996 and 1998

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data

	Males	Females	Persons
1994	4,693	2,059	6,752
1996	6,315	3,441	9,755
1998	5,234	4,555	9,789

7.6.4 Are we losing 'prime aged' people from South Australia?

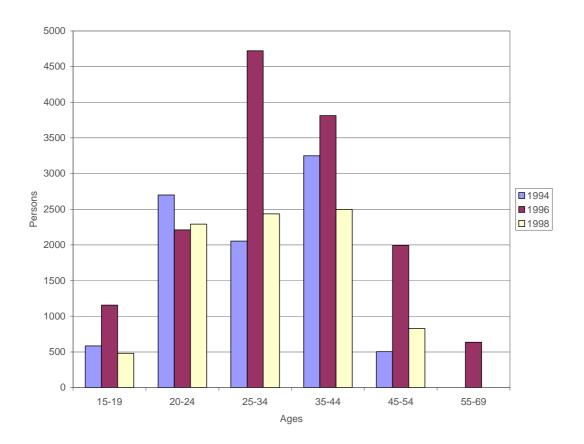
The LMS indicates that South Australia is loosing a significant number of 'prime age' people to other states as Table 7.43 and Figure 7.30 indicate. The majority of people leaving South Australia in the years 1994, 1996 and 1998 were in the 25-34 and 35-44 year age groups. Typically these people tend to be highly skilled with relatively high incomes.

Table 7.43: Age of Persons Leaving South Australia, Persons, 1994-98

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research

	1994	1996	1998
15-19	583	1,156	482
20-24	2,699	2,211	2293
25-34	2,052	4,722	2437
35-44	3,250	3,813	2498
45-54	504	1,993	828
55-69	0	635	0
Total	9,088	14,529	8540

Figure 7.30: Age of Persons Leaving South Australia, Persons, 1994-98



7.6.5 Why are people leaving?

The LMS provides an indication of the range of reasons for people leaving South Australia. Table 7.44 and Figures 7.31 to 7.33 summarise these reasons. The most commonly cited reasons for leaving South Australia in 1994, 1996 and 1998 were 'Job leaver', 'Ceased a job with employer or business' and 'Better job, new business, retired, family or other reasons'. This suggests that a large number of people have left in search of career advancement and security. A significant number also cited 'Changed locality but not employer business', suggesting that many people are leaving the state due to the re-location of their employer or of functions within their employing organisation, or for career advancement within an organisation. A number of people cited 'Employment reasons' suggesting a range of issues related to the desire or necessity for a change in employment.

Table 7.44: Reasons for Leaving South Australia by Persons, 1994-98

	Job loser	Retrenched	Job was temporary or seasonal and did not leave to return to	studies Own ill health or injury		Job leaver	Ceased a job with employer business	Unsatsfactory work conditions	Job was temporary or seasonal and left to return to studies		Better job, new business, retired, family or other reasons	Changed locality but not employer business	Employment reasons	Total
1994	0	0		0	0	8,211	4,269	0		0	3,598	2056	638	9,088
1996	3,641	1,746	31	14	0	10,307	7,364	429		0	6,433	2,447	1,565	14,529
1998	0	0		0	0	6,828	4,486	0		0	4,383	972	972	7746

Figure 7.31: Reasons for Leaving South Australia, 1994, Percent of Total Persons

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research

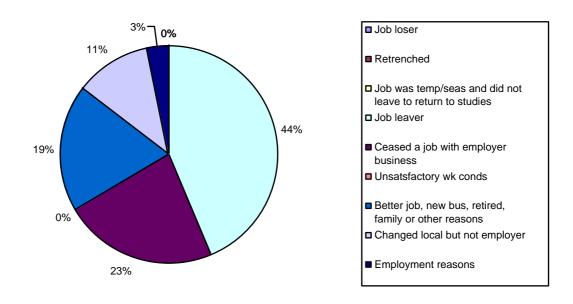


Figure 7.32: Reasons for Leaving South Australia, 1996, Percent of Male Persons

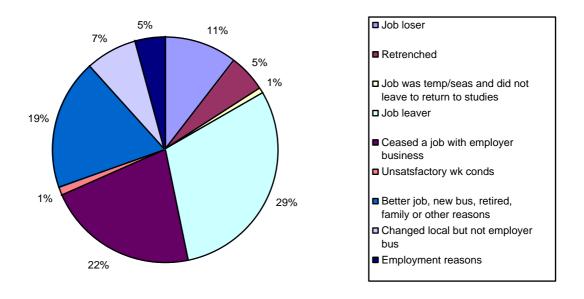
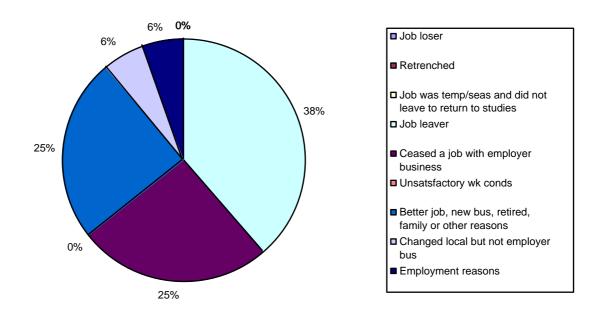


Figure 7.33: Reasons for Leaving South Australia, 1998, Percent of Female Persons

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research



7.6.6 Why are people coming to South Australia?

Understanding why people migrate to South Australia is as important as understanding the reasons why they leave. Table 7.45 indicates that the main reasons cited by people for leaving employment before moving to South Australia in 1998 were 'Job Loser', 'Ceased job with employer/business', and 'Better job, now business or family or other reasons'. While similar reasons were cited in 1994 and 1996, 'retrenchment' featured as a significant reason for leaving in 1996, reflecting the more difficult economic conditions prevailing at the time.

Table 7.45: Reasons for Leaving Job Before Moving to South Australia

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research

Year	Job loser	Retrenched	Job was temporary or seasonal and did not leave to return to study	Own ill health or injury	Job leaver	Ceased a job with an employer/business	Unsatisfactory work conditions		Better job, new business, family or other reasons	Changed locality but not employer/business	Employment reasons	Personal reasons		Total
1998	2,601	791	1,207	602	7,189	6,009		361	5,648	1,180	786		394	9,789
1996	2,968	2,025	518	425	6,787	5,007		387	4,621	1,780	1,063		717	9,755
1994	1,515	1,384	* 0	13	5,237	4,328		462	3,867	909	749		160	6,752

7.6.7 Which industries and occupations are people employed in after they leave?

Table 7.46 indicates that the main industry sectors employing people leaving South Australia in 1994, 1996 and 1998 were property and business services, health and community services and manufacturing.

The LMS provides an incomplete picture of the occupational background of those leaving South Australia. Table 7.47 indicates that the main occupations of those leaving South Australia for the three periods surveyed include Professionals, Managers and Administrators, Clerks, Salespersons and personal service workers and Tradespersons.

Table 7.46: People Leaving South Australia by Industry Sector, Persons, 1994-96

	1994	1996	1998
Agriculture, forestry, fishing	na	0	0
Mining	na	na	0
Manufacturing	1,181	na	1132
Electricity, gas, water supply	0	0	0
Construction	533	1,396	700
Wholesale trade		1,537	na
Retail trade	1,050	1,042	na
Accomodation, cafes, restaurants		602	0
Transport and storage	na	654	0
Communication services	na	na	0
Finance and insurance		na	na
Property and business services	1,513	802	2052
Govt. admin. and defence	331	570	na
Education		na	na
Health and community services	1,075	1,368	1173
Cultural and recreational services	0	na	na
Personal and other services	na	na	na
Total	6,555	9,601	7433

Table 7.47: Occupations of Persons Leaving South Australia by Number, 1994, 1996 and 1998

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research

	1994	1996	1998
Managers and administrators	764	2,201	
Professionals	1,108	1,561	1674
Para-professionals	432		
Tradespersons	652	801	
Clerks	1,247		
Salespersons and personal service workers	1,320		
Plant machine operators and drivers	442		
Labourers and related workers	590		
Total	6,555		

7.6.8 Are highly qualified and skilled people interstate?

It appears that the majority of people leaving South Australia have relatively high qualifications and skill levels. Over two thirds of those who left South Australia in 1994, 1996 and 1998 had post-school qualifications including bachelor degrees, diplomas and/or had skilled vocational qualifications (see Table 7.48 and Figure 7.34).

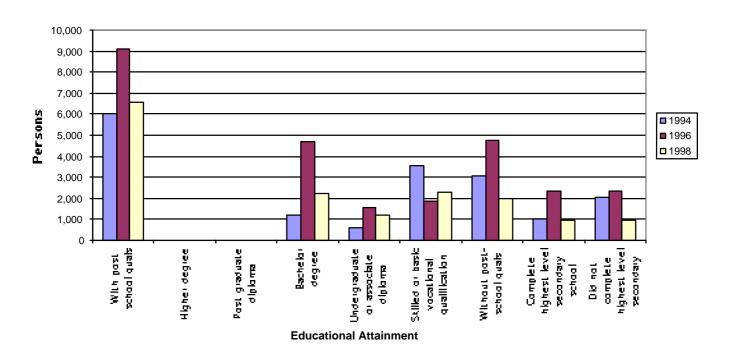
Table 7.48: Qualifications of People Leaving South Australia by Number, 1994-98

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research

	1994	1996	1998
With post school qualifications	6,011	9,088	6571
Higher degree	na	na	na
Post graduate diploma	na	na	na
Bachelor degree	1,218	4,709	2214
Undergraduate or associate diploma	588	1,575	1215
Skilled or basic vocational qualification	3,540	1,888	2305
Without post-school qualifications	3,078	4,735	1969
Completed highest level of secondary school	1,012	2,368	984
Did not complete highest level of secondary school	2,065	2,368	985
Total	9,088	14,529	8541

Figure 7.34: Qualifications of People Leaving South Australia by Number, 1994-98

Source: ABS Labour Mobility Survey, Cat. 6209.0, unpublished data, Centre for Labour Research



7.7 EMPLOYMENT VACANCIES

7.7.1 Introduction

An important element in the discussion regarding a 'bring them home' strategy is that any such policy should aim at *not* ...

- bringing people to the State to compete with people already resident in the State for job opportunities;
- bringing in people who will be unemployed

Hence people attracted to the State must create their own jobs or fill current vacancies in the labour market. The present section addresses the issue of job vacancies in the State.

7.7.2 Job vacancies and unemployment

There are currently significantly fewer job vacancies than unemployed persons. In May 2000 there were around 40 unemployed people for every job vacancy. This suggests that a large number of people are not employed simply because there are not enough jobs available. While this is true to a large extent a more complex answer is necessary to explain the reasons for unemployment in South Australia. It is clear that a proportion of unemployed people find it difficult to secure paid work because they lack the necessary skills and experience required of positions. For this reason skill shortages can emerge. A large number of jobs remain unfilled because they are in remote areas, or are insecure or poorly paid. There is a need to better understand these dynamics in order to maximise prospects for employment and to enable us to distinguish between genuine skill shortages and a shortage of secure and rewarding jobs.

It is important to acknowledge that while experienced and highly skilled people are less likely to be unemployed, large numbers of such people are unemployed at the moment. Recent ABS data illustrate this, indicating that a large number of highly skilled, qualified and experienced people are unemployed.

Table 7.49: Unemployment by Major Occupational Group by '000 Persons, South Australia, May 2000

Source: ABS Labour Force Survey, Cat. no. 6203.0

Occupation major group	'000 persons
Managers and Administrators	0.5
Professionals	2.5
Associate Professionals	1.8
Tradespersons and Related Workers	3.3
Advanced Clerical and Service Workers	1.0
Intermediate Clerical, Sales and Service Workers	3.1
Intermediate Production and Transport Workers	2.1
Elementary Clerical, Sales and Service Workers	2.9
Labourers and Related Workers	7.1
Unemployed other **	38.9
Total	63.2

Table 7.49 indicates that a large proportion of unemployed people are in high skill occupational categories, post-school qualifications. Table 7.50 indicates that around 500 Managers and Administrators, 2,500 Professionals, 1800 Associate Professionals and 3,300 Tradespersons and Related Workers were unemployed in May 2000. This is relatively large pool of highly skilled people.

Table 7.50 indicates that around one third of unemployed people in May 1999 had a post-school qualification. This data should be regarded with caution due to high standard errors it does suggest that there are a large number of highly qualified unemployed people.

Table 7.50: Unemployed Persons with a Post-school Educational Qualification by Field of Study, May 1999

Source: ABS Transition from Education to Work, unpublished data

Main field of study	
Business And Administration	* 3,857
Health	** 717
Education	* 880
Society And Culture	* 2,759
Natural And Physical Sciences	* 1,544
Engineering	5,480
Architecture And Building	* 1,364
Agriculture And Related Fields	** 634
Miscellaneous Fields	* 1,932
Not Stated/Uncodeable/Inadeq.Desc.	** 0
Total	19,168

^{*} This estimate has a relative standard error of between 25 to 49 percent and care should be exercised when using it.

7.7.3 Trends in employment vacancies

Figure 7.35 and Table 7.51 indicate that employment vacancies have steadily risen and unemployment has fallen over the two years to 2000 in South Australia. While the gap between the number of vacancies and the number of unemployed has narrowed there remain around one vacancy for every forty unemployed persons. This is significantly higher than at the end of the previous national economic recovery in April 1990 when there were thirty five unemployed people for every vacancy in South Australia.

Over the last four years South Australian employment vacancies have steadily increased but not as significantly as other states and the nation as a whole. We can measure this relative performance through an examination of employment vacancy rates or indexes. Employment vacancy rates or vacancy indexes provide useful indicators of demand for employment.

^{**} This estimate has a relative standard error of 50 percent or more and should only be used to aggregate with other estimates to levels with RSE's of less than 25 percent.

Figure 7.35: Employment Vacancies and Unemployment, South Australia, April 1990 to April 2000

Source: ANZ Job Vacancies, Centre for Labour Research

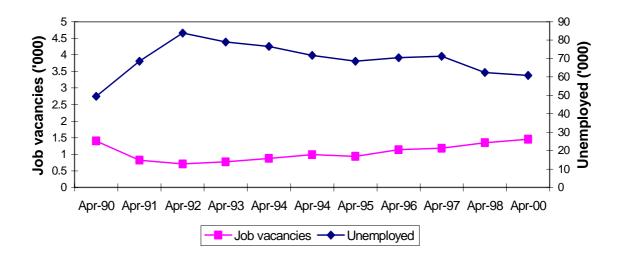


Table 7.51: Employment Vacancies and Unemployment, South Australia, April 1990 to April 2000

Source: ABS Labour Force Survey and ANZ job vacancies survey, various, Centre for Labour Research

Year	Unemployed	Job vacancies	No. of u/e to each job vacancy
Apr-90	49,500	1300	35: 1
Apr-91	68,600	800	83: 1
Apr-92	83,900	700	118: 1
Apr-93	79,000	700	102: 1
Apr-94	76,600	800	87: 1
Apr-94	71,700	900	72: 1
Apr-95	68,500	900	73: 1
Apr-96	70,400	1,100	61: 1
Apr-97	71,300	1,100	60: 1
Apr-98	62,400	1,300	46: 1
Apr-00	60,800	1,400	41: 1

The ABS employment vacancy rate measures the number of vacancies relative to the number of people unemployed. Figure 7.36 indicates that South Australia has consistently recorded a lower vacancy rate than Australia for the last five years. Disturbingly the South Australian vacancy rate began to trend down at end of 1999 while the Australian rate continued to rise.

Figure 7.37 indicates that South Australia's vacancy rate was lower than all other mainland states and the Northern Territory for most of the 1995-2000 period. Relatively strong demand was recorded in New South Wales, Western Australia, Victoria and the Northern Territory.

Figure 7.36: ABS Job Vacancy Rates, South Australia and Australia, May 1995 – May 2000

Source: ABS Job Vacancies



A further measure of employment demand is the DEWRSB Skilled Vacancy Index (SVI). This index measures the number of 'professional' and 'skilled' vacancies based on a count of vacancies advertised in newspapers throughout Australia. Figure 7.38 indicates that South Australia consistently recorded a lower SVI than the nation as a whole for much of the past five years. This situation improved in September 1999 when South Australia recorded a higher SVI than Australia and other mainland states except Queensland (see Figure 7.39).

The South Australian SVI was the lowest of all mainland states for most of the 1995-2000 period. The strongest SVI recordings were in the Northern Territory and New South Wales.

Figure 7.40 and Table 7.52 provide an indication of the number of unemployed people relative to the number of vacancies for South Australia and the eastern states. The table suggests that there is much greater competition for jobs in South Australia and Queensland compared with New South Wales and Victoria. In 1999 there were around 41 unemployed people for every job vacancy in South Australia. There were less than half this number of unemployed people competing for jobs in New South Wales and Victoria.

Figure 7.37: ABS Job Vacancy Rates, Selected States and South Australia, May 1995
- May 2000

Source: ABS Job Vacancies

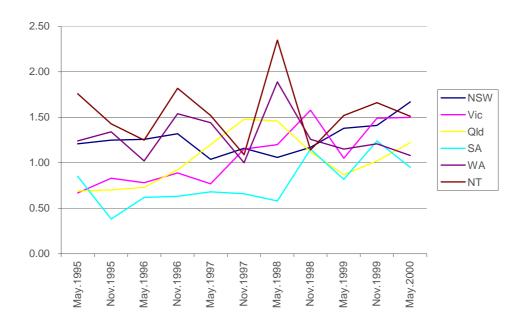


Figure 7.38: Skilled Vacancy Index, Australia and South Australia, 1991-2000

Source: DEWRSB



Figure 7.39: Skilled Vacancy Index, Selected States, Territories and South Australia, 1991-2000

Source: DEWRSB

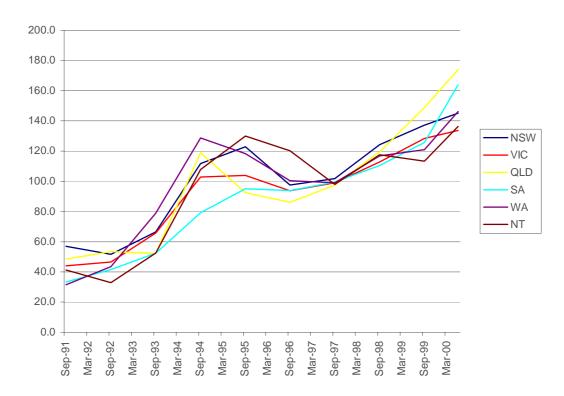


Figure 7.40: Ratio of Persons Unemployed to Job Vacancies, South Australia, New South Wales, Victoria, Queensland, 1990–99

Source: Job Vacancies, Australia, ABS cat. no. 6354.0 and Labour Force, Australia, ABS Cat. no. 6206.0

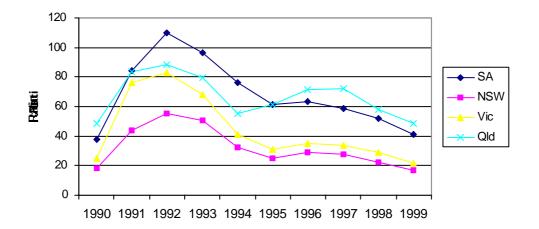


Table 7.52: Ratio of Persons Unemployed to Job Vacancies, South Australia, New South Wales, Victoria, Queensland, 1990 –99

Source: Job Vacancies, Australia, ABS cat. no. 6354.0 and Labour Force, Australia, ABS Cat. no. 6206.0

	SA	NSW	Vic	Qld
1990	37.4	18.3	25.3	48.7
1991	84.5	43.9	75.9	83.4
1992	109.9	55.1	82.9	88.0
1993	96.3	50.9	68.0	79.7
1994	76.2	32.5	40.9	55.0
1995	61.4	24.8	31.3	61.1
1996	63.4	29.2	34.8	71.4
1997	58.7	27.3	33.9	72.1
1998	51.6	22.3	28.8	58.0
1999	40.9	16.5	21.5	48.5

Figure 7.41: Average Monthly Skilled Job Vacancies 1995-2000 by Number, Professionals, Paraprofessionals, Tradespersons by New South Wales, Victoria, Queensland, Northern Territory and South Australia

Source: DEWRSB Skilled Vacancy Survey, Centre for Labour Research

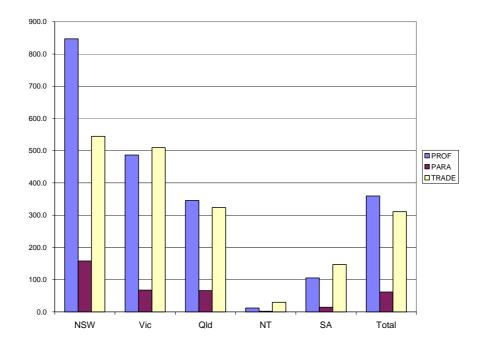


Figure 7.41 and Table 7.54 indicate the average monthly number of skilled job vacancies for South Australia and selected mainland States and Territories over the 1995-2000 period. This provides an indicator of the numerical spread of professional, paraprofessional and tradesperson vacancies throughout Australia. An interesting feature of the data is the variation in the proportion of these occupational categories between regions. South Australia appears to have relatively fewer professional and paraprofessional vacancies.

Table 7.53: Average Monthly Skilled Job Vacancies, Broad Occupational Categories, New South Wales, Victoria, Queensland, Northern Territory and South Australia, 1995-2000

Source: DEWRSB Skilled Vacancy Survey, Centre for Labour Research

	Professionals	Paraprofessionals	Tradespersons		
NSW	847.2	158.1	544.6		
Vic	486.5	67.6	509.6		
Qld	345.5	66.1	323.9		
NT	12.0	2.0	29.8		
SA	105.2	14.3	146.9		
Total	359.3	61.6	311.0		

Table 7.54: Average Monthly Skilled Vacancies by State, Proportion of Total Vacancies by Professional, Paraprofessional and Trades Categories, March Quarter 2000

Source: DEWRSB Skilled Vacancy Survey, Centre for Labour Research

	Professional occupations	% of total vacancies	Paraprofessio nal vacancies	% of total vacancies	Trades	% of all vacancies	Total vacancies
SA	123.3	31.2	21.4	5.4	251.0	63.4	395.7
NSW	938.1	52.1	163.7	9.1	698.4	38.8	1800.2
Vic	605.4	47.5	66.4	5.2	602.5	47.3	1274.3
Qld	442.2	45.7	55.0	5.7	471.2	48.7	968.4
NT	12.6	30.6	1.8	4.4	26.8	65.1	41.2

7.7.4 Recent trends in skilled vacancies

There has been a significant improvement in employment vacancies in South Australia over the last six months. This strong growth is unlikely to be sustained given the slowing down of national economic growth, higher interest rates and the end of the domestic construction boom. Recent trends in employment vacancies follow the pattern set during the last few years. Figure 7.42 and Table 7.55 indicate that South Australia does have relatively less demand for professional and paraprofessional positions compared with the eastern states. A large proportion of the demand for skilled vacancies in South Australia is for tradespersons, reflecting the brought forward impact on housing construction of the GST.

In the first quarter of 2000, South Australia had a lower proportion of professional vacancies (31.1 percent) compared with New South Wales (52.1), Victoria (47.5 percent) and Queensland (45.6 percent). Vacancies for paraprofessionals were also lower in South Australia (5.4 percent) than for New South Wales (9 percent) and Queensland (5.6 percent). In contrast South Australia had a higher proportion of trades vacancies as a percentage of total vacancies than the Eastern States. A slightly higher proportion of trades positions were vacant in the Northern Territory compared with South Australia.

The relatively low demand for professionals and paraprofessionals in South Australia is likely to place South Australia at a disadvantage in retaining and attracting qualified professionals.

Figure 7.42: Percentage of Total Vacancies by Professional Vacancies, Paraprofessional Vacancies, Trades Vacancies, South Australia and Selected States and the Northern Territory, First Quarter 2000

Source: DEWRSB Skilled Vacancy Survey, Centre for Labour Research

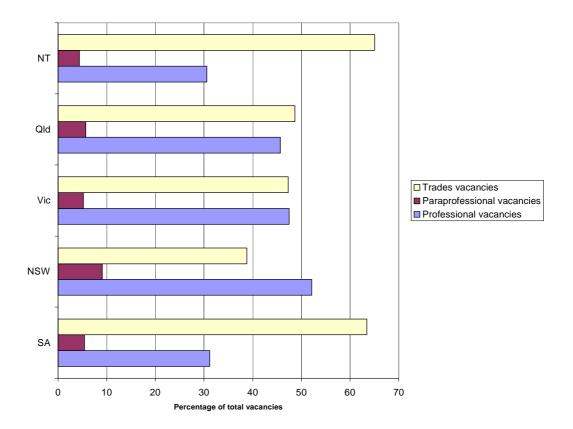


Table 7.55 provides an indication of recent demand for a range of skilled occupations in the eastern states and the Northern Territory.

Table 7.55: Average Monthly Skilled Job Vacancies by Selected Occupations, New South Wales, Victoria, Queensland, Northern Territory and South Australia, 1995-2000

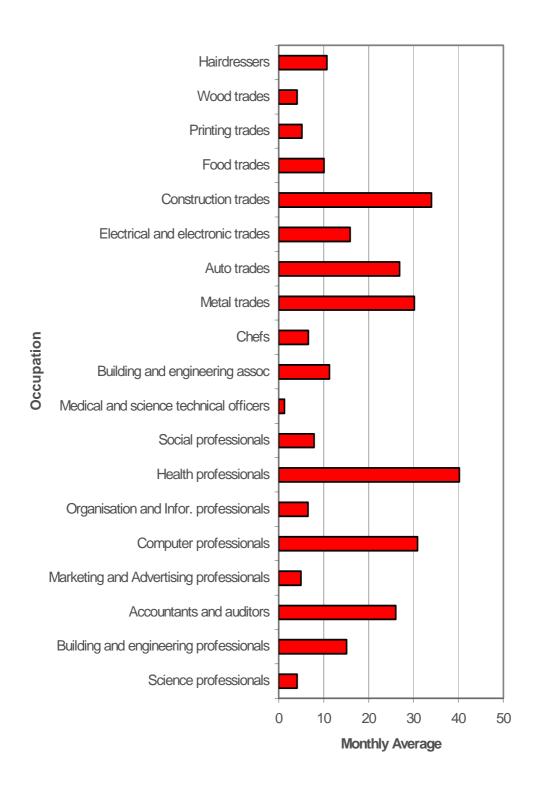
Source: DEWRSB Skilled Vacancy Survey, Centre for Labour Research

	New	Vic	Qld	NT	SA
	South				
	Wales				
Science professionals	28.0	12.5	12.2	0.7	4.1
Building and engineering professionals	138.9	83.8	56.3	2.1	15.1
Accountants and auditors	149.3	128.8	70.3	1.7	26.1
Marketing and Advertising professionals	78.7	16.2	15.2	0.3	5.0
Computer professionals	258.7	117.7	251.1	1.1	30.9
Organisation and Infor. professionals	80.2	20.8	18.1	0.6	6.5
Health professionals	282.5	137.4	99.3	4.3	40.2
Social professionals	89.3	86.6	73.7	1.9	7.9
Medical and science technical officers	12.6	2.9	6.3	0.1	1.3
Building and engineering assoc	99.4	45.0	44.8	1.3	11.3
Chefs	71.2	59.8	24.4	2.2	6.6
Metal trades	54.7	66.9	70.7	6.3	30.2
Auto trades	36.9	75.0	49.1	6.1	26.9
Electrical and electronic trades	96.1	43.5	42.2	5.7	15.9
Construction trades	98.5	98.2	59.8	4.2	34
Food trades	66.8	54.7	25.3	2.4	10.1
Printing trades	46.3	31.2	9.2	0.4	5.2
Wood trades	18.0	23.1	14.4	0.8	4.1
Hairdressers	49.8	49.1	23.0	1.1	10.7
Other ungrouped occ	51.9	27.5	20.3	0.6	4.2

Figure 7.43 indicates the strongest demand expressed by the average number of monthly skilled job vacancies in South Australia includes Health Professionals (40), Computer Professionals (31), Metal Trades (30), Auto Trades (27), Accountants and Auditors (26) Electrical and Electronic Trades (16) and Building and engineering professionals (15).

Figure 7.44 provides an indication of skilled vacancies by occupational grouping as a proportion of total skilled vacancies for the eastern states and the Northern Territory. It is evident once again that larger proportions of professional and paraprofessional vacancies exist in the eastern states. South Australia compares reasonably favourably with the eastern states in relation to Science professional and Organisation and Information Professionals and less well in relation to Computing Professionals and Social Professionals.

Figure 7.43: Average Monthly Job Vacancies by Selected Occupations, South Australia, 1995-2000



SA NT Qd Viс NSW 0% 30% 40% 50% 60% 80% 90% 10% 20% 70% 100% ■ Science professionals ■ Building and engineering professionals ■ Accountants and auditors ■ Marketing and Advertising professionals
■ Computer professionals Organisation and Infor. professionals ■ Health professionals ■ Social professionals Medical and science technical officers. ■ Building and engineering assoc Chefs ■ Metal trades Autotrades ■ Bectrical and electronic trades Construction trades ■ Food trades Printing trades ■ Wbod trades ■ Hairdressers Other ungrouped occ

Figure 7.44: Average Monthly Skilled Job Vacancies by Occupation as a Proportion of Total Skilled Vacancies, New South Wales, Victoria, Queensland, Northern Territory and South Australia, 1995-2000

7.7.5 An alternative skilled vacancy index

To measure the relative demand for skilled vacancies between selected states a skilled vacancy index has been constructed using DEWRSB Skilled Vacancy Survey data and ABS Labour Force Industry Employment data. Data for the three months to May 2000 have been averaged and an index derived by dividing the number of vacancies in each DEWRSB occupational group by the number of persons employed in each occupational group and multiplying the figure obtained by one thousand. This index may be a useful alternative for policymakers and practitioners attempting to identify relative trends in occupational demand in Australia and South Australia.

In the May quarter 2000, South Australia had a higher proportion of vacancies per thousand persons employed for computing professionals than New South Wales, Victoria, Queensland and the Northern Territory, the favoured States of destination for emigrants from South Australia (see Table 7.56). South Australia also had a higher proportion of vacancies per thousand persons employed for organisation and information professionals than the other selected States, with the exception of New South Wales.

Table 7.56: Vacancies per Thousand Persons Employed in SVS Occupations, South Australia by Selected States, May Quarter 2000

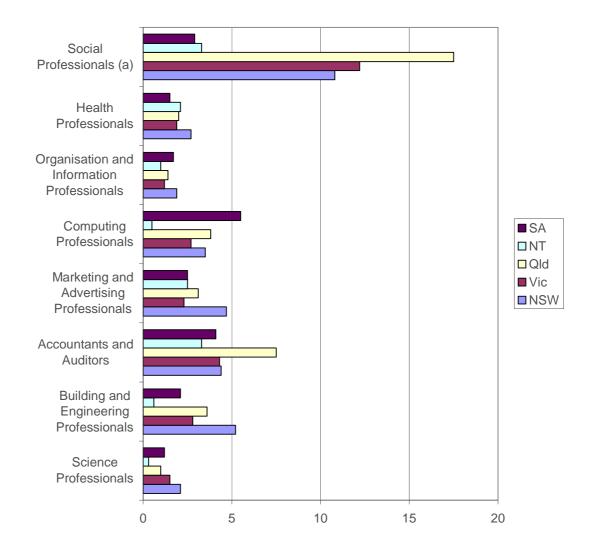
Source: DEWRSB Skilled Vacancy Survey and ABS Labour Force Survey, Centre

for Labour Research

	NSW	Vic	Qld	NT	SA
Science Professionals	2.1	1.5	1.0	0.3	1.2
Building and Engineering Professionals	5.2	2.8	3.6	0.6	2.1
Accountants and Auditors	4.4	4.3	7.5	3.3	4.1
Marketing and Advertising Professionals	4.7	2.3	3.1	2.5	2.5
Computing Professionals	3.5	2.7	3.8	0.5	5.5
Organisation and Information Professionals	1.9	1.2	1.4	1.0	1.7
Health Professionals	2.7	1.9	2.0	2.1	1.5
Social Professionals (a)	10.8	12.2	17.5	3.3	2.9
Medical and Science Technical Officers	0.4	0.1	0.2	0.0	0.5
Building and Engineering Associates	3.3	3.6	1.5	0.3	2.3
Chefs	7.0	7.3	5.2	6.7	4.8
Metal Trades	0.9	0.8	1.6	2.5	1.6
Vehicle Trades	1.1	2.2	2.1	4.4	3.1
Electrical and Electronic Trades	2.1	0.8	1.6	2.8	1.5
Construction Trades	1.9	2.4	3.1	0.8	6.6
Food Trades	2.0	2.9	1.1	2.7	1.6
Printing Trades	3.5	5.7	2.7	3.3	1.4
Wood Trades	2.1	3.6	2.7	2.0	1.6
Hairdressers	2.8	4.8	3.6	4.2	3.6
Other Ungrouped Occupations (b)	3.7	2.7	2.9	5.0	1.3

Figure 7.45: Vacancies per Thousand Persons Employed in SVS Professional Occupations, South Australia by Selected States, May Quarter 2000

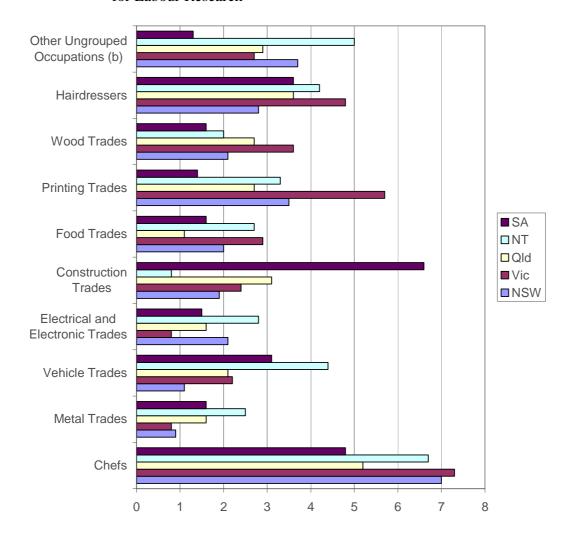
Source: DEWRSB Skilled Vacancy Survey and ABS Labour Force Survey, Centre for Labour Research



In the May quarter 2000, South Australia had a higher proportion of vacancies per thousand persons employed for construction trades workers than New South Wales, Victoria, Queensland and the Northern Territory (see Figure 7.45). South Australia also had a higher proportion of vacancies per thousand persons employed in the vehicle trades and the metal trades, with the exception of the Northern Territory (see Figure 7.46).

Figure 7.46: Vacancies per Thousand Persons Employed in SVS Trades Occupations, South Australia and Selected States, May Quarter 2000

Source: DEWRSB Skilled Vacancy Survey and ABS Labour Force Survey, Centre for Labour Research



7.8 SKILL SHORTAGES IN SOUTH AUSTRALIA

7.8.1 Introduction

This section provides an overview of recent skill shortages in South Australia. A summary of shortages in the professions, information technology and trades areas identified by the Department of Employment, Workplace Relations and Small Business is provided. Additional material on shortages identified by Industry Training Boards is summarised along with findings of a number of industry and regional skills audits.

7.8.2 What is a skill shortage?

Skill shortages normally exist where employers find it difficult to find suitably qualified or experienced people to fill an employment vacancy. Shortages arising in the context of

rapidly growing economies or as the result of strong growth in emerging industry sectors are a significant impediment to employment growth and investment. Overcoming such shortages normally requires skilled migration or intensive training or retraining programs. Where occupations are in shortage nationally it will be necessary for South Australian employers to provide competitive salary packages, employment security and opportunities for career advancement. There are however a range of other reasons for skill shortages which require a more complex and targeted set of responses. These include ...

- inadequate training structures, workforce planning or lack of investment in education and training;
- technological and workplace changes demanding new IT and other skills;
- fewer prospects for promotion or lower levels of remuneration relative to other occupations, industries or locations;
- poor image or working conditions or remote location of an occupation leading to high turnover or difficulties recruiting employees.

While there is evidence that a range of skill shortages exist, it is difficult to quantify them with any certainty. Consultations with State and Federal employment and training agencies and private recruitment agencies confirm the existence of shortages in a range of industry sectors. Anecdotally, it appears that such shortages are likely to be relatively few and that the reasons for such shortages are often complex, requiring a sophisticated and multifaceted response.

In reviewing the available information on skill shortages in South Australia it has become clear that there is an urgent need to develop an institutional capacity within Government to more accurately quantify and explain skill shortages. A regularly updated database on skill shortages would be of great assistance to policy makers and education and training providers.

Overcoming skill shortages requires a sophisticated understanding of industry and labour market trends and prospects. It also requires an integrated and strategic response from the education and training sectors and a willingness to invest adequately in education and training in anticipation of potential shortages. Skilled migration from interstate and overseas will remain an important method of addressing skill shortages as well as enriching Australian society.

The most comprehensive effort to monitor skill shortages in South Australia is undertaken by the Department of Employment, Workplace Relations and Small Business (DEWRSB). DEWRSB identifies likely skill shortages through analysis of its' Skilled Vacancy Survey – a survey of positions advertised in daily newspapers. In addition DEWRSB interviews employers who have recently advertised positions to determine whether they have had difficulty filling the position. Other information on skill shortages is available from a number of recent industry and regional skills audits. Combined this research on skill shortages has indicated the existence or a range of skill shortages in South Australia. Such information must be used with caution as it is rarely updated regularly. A further problem in data collection on skill shortages is the wide variation in methodology used by different researchers. This could be overcome by the development of an agreed framework for the collection of such data and also by the establishment of a research unit within Government to support and co-ordinate the gathering of industry and workplace employment and training data.

7.8.3 Professions and information technology

In late 1999 DEWRSB interviewed a range of employers about recently advertised positions. These consultations revealed that there was a statewide shortage of accountants, nurses, pharmacists and commercial lawyers. It should be noted that where a 'statewide' skill shortage exists in South Australia, similar shortages exist nationwide. There are few 'statewide' skill shortages where South Australia is not competing with other states. A number of regional shortages have been identified including secondary teachers and child care workers. Such shortages are also common throughout Australia, reflecting the difficult of attracting and retaining people in regional Australia. A detailed list of skill shortages in the professions, trades and information technology areas is outlined in Table 7.57 below and a national comparison is provided at the end of this section.

Table 7.57: Skills Shortages in the Professions and Information Technology, South Australia, September, 1999

Source: DEWRSB Labour Economics Office

Occupational category	ASCO occupational group	Occupation	Shortage
Professional	Child care	Child care worker	R
occupations			
	Accountants	Accountant (taxation)	S
	Registered Nurse	Registered nurse	S
		Operating theatre	S
		Accident emergency	S
		Critical intensive care	S
		Aged care	S
	Health specialists	Pharmacist	S
		Physiotherapist	R
	Secondary teachers	Manual arts	R
	•	Maths	R
		Physics/Chemistry	R
ccupations		Home economics	R
	Other Professions	Commercial lawyers	S
Information technology	Client/server applications	COBOL	D
teemology		SAP	D
		Peoplesoft (enterprise based multiple applications)	S
	Language (SQL)	Oracle	S
		Ingres	D
	Database	AS400	S
		Powerbuilder	D
	General application development	C++	S
		Delphi	S
		Visual basic	Ď
	Communications	CISCO certified professionals	D

M: metropolitan shortage, R: regional shortage, S: statewide shortage, D: difficulty in finding staff Source: *Skill Shortages in the Trades - South Australia, October 1999*, Labour Economics Office

7.8.4 Skilled tradespersons

Data on shortages for skilled tradespersons is presented in Table 7.58. DEWRSB identified 14 trades with skill shortages in South Australia in 1999. These include metal machinists; toolmakers, sheetmetal workers; motor mechanics; automotive electricians; panel beaters; vehicle painters, refrigeration and air-conditioning mechanics; joiners; fibrous and solid plasterers; bricklayers, cabinetmakers, hairdressers; and furniture upholsterers.

Table 7.58: Shortages in the Trades, South Australia, 1999

Source: DEWRSB LEO

Trade	Current labour market rating	Expected future labour market rating
Fitter	R	R
Metal Machinist	S	S
Toolmakers	S	S
Sheetmetal Worker	S	S
Motor Mechanics	S	S
Automotive Electricians	S	S
Panel Beaters	S	S
Vehicle Painters	S	S
General Electricians	R	R
Refrigeration and Air	S	S
conditioning Mechanics		
Carpentry and Joinery	S	S
Tradespersons		
Fibrous Plasterer	S	
Bricklayers	S	
Solid Plasterers	M	M
Chef	R	R
Cook	R	R
Wood Machinist	M	M
Cabinetmaker	S	S
Hairdressers	S	S
Furniture Upholsterer	S	S

M: metropolitan shortage, R: regional shortage, S: statewide shortage, D: difficulty in finding staff Source: *Skill Shortages in the Trades - South Australia, October 1999*, Labour Economics Office, based on data from the Skilled Vacancy Survey, (SVS).

7.8.5 Industry skills audits

A range of skills audits have recently been undertaken in South Australia. These surveys of industry and workplace trends provide valuable additional information on skill gaps and shortages. Such surveys have been undertaken in for the following industries ...

- Automotive
- Electrical and Electronics
- Defence

Skills audits in the transport and process manufacturing sectors were close to completion as this report went to press. Skill shortages identified in the automotive and electrical and electronics industries and in Southern Adelaide are summarised at the end of this section. Further analysis of the dimensions and reasons for these shortages is warranted in determining appropriate policy responses.

7.8.6 Responding to skills shortages

The regular collection of data on skill shortages and education and training needs provides a basis for better informed and targeted responses to address current and likely future skill shortages. A recent discussion paper on skill shortages in the trades by DEWRSB (September, 1999) suggests some strategies for responding to skill shortages. These and other approaches are discussed below in the South Australian context.

Identifying and understanding the reasons for skill shortages requires direct contact with employers, industry associations and education and training organisations. Such information needs to be gathered on a regular basis if it is to of any use. Ideally regular skills and education needs audits should be undertaken of all industries. A central database of skill shortages in South Australia should be made available on the Internet. Recent skills audits provide the basis for the development of such a database. Such a database should be regularly updated and maintained by the State Government in collaboration with Industry and Professional Associations, DEWRSB, ITABs, Institute of TAFE, Universities and Schools. This is likely to require additional research capacity, capable of developing and maintaining a skill and education needs database as well as reporting on industry and labour market trends and prospects. The establishment of a Skills and Industry Trends Research Unit could provide the focus for the development of such a capability within South Australia.

As Section 7.4 of this report indicates a range of employment opportunities will arise due to retirement. It is important to identify at an early stage the likely impact of retirement upon future recruitment patterns. More detailed research on likely occupational and industry retirement and replacement patterns is necessary to enable workplaces and policy makers to respond to the impact of retirement on recruitment needs.

A significant number of people leave their trade or profession for alternative employment or leave the labour force all together. Data from the 1996 Census reveals that only 40 percent of qualified tradespersons were still working in trade employment (DEWRSB, 1999). This loss of skills, knowledge and experience contributes to skill shortages. It is likely that a proportion of people who have left their trade or profession would return under certain conditions. A survey of the 'Career Paths of Persons with Trade Qualifications' by the ABS indicated that around 46 percent of people who left their trade would return to it if certain conditions were present. The main conditions mentioned by those surveyed included 'ready availability of trade and alternative non-trade employment' and 'better pay, promotion or improved career prospects' (DEWRSB:10).

High rates of occupational wastage, that is qualified people working in occupations other than that they were originally qualified to work in appears to be one of the major causes of skill shortages. Significant numbers of workers leave their current occupation in search of a more rewarding and fulfilling one. Changes in industrial relations, training and workplace

organisation, management practices and remuneration are necessitated in occupations and industry sectors with high wastage rates.

Current skill shortages might best be addressed through skilled migration from interstate and overseas while other may be filled by locally available people. Before reaching this conclusion much more work needs to be done on quantifying and identifying the reasons for particular skill shortages in South Australia. It is very important that the reasons for the existence of particular skill shortages be clearly identified so that appropriate strategic responses can be developed. As indicated earlier, it is likely that a range of skill shortages are due to relatively poor working conditions, inadequate remuneration and job insecurity. These issues require policy and organisational responses by a range of institutions.

The most desirable medium-term solution to emerging skill shortages appears to involve a combination of the following strategies ...

- identifying and quantifying skill shortages in a systematic and integrated way across the state;
- gearing the local education and training system up to meet expected demand;
- improving working conditions and wages in industries with high turnover and in occupations with high wastage rates;
- supporting industry sectors and workplace to introduce 'best practice' employment practices;
- improving recognition of qualifications gained overseas;
- providing additional incentives and encouragement for the take up of group training and group apprenticeship schemes.

7.8.7 Electronics industry skills audit

The Centre for Economic Studies (CES) skills audit of the Electronics Industry in May 2000 found there was a progressive upgrading of the South Australian electronics workforce measured by the level of qualifications in the industry since 1994. The CES forecast that 11.4 percent of the electronics industry workforce would have post-graduate qualifications by 2000, up from 4.4 percent in 1994. CES also predicted overall employment growth in the industry would continue to grow at around 9 percent per annum to 2007.

The CES report found net interstate migration from South Australia of middle and high income earners, and people with degree qualifications in electronics and other areas was concentrated in the age groups 20-24 and 25-29 years. There was a need to address local skill shortages in South Australia because of the difficulties interstate migration posed to the retention of the skilled and qualified.

Outward migration was forcing South Australian firms to recruit graduates in the place of experienced workers who had left the State.

The number of all university graduates entering the labour market in 1999 and 2000 was estimated to be just twice the number required by the electronics industry alone. The number of post-graduates was about half the number required by the electronics, IT and defence industries in South Australia.

The CES report also found a shortfall in skill requirements at the trade-post-trade level based on TAFE output and industry demand.

The report predicted high demand for electronics engineers, computer systems engineers, software engineers and persons with qualifications in physics and mathematics will continue. RF electronic engineers were identified as being in critical shortage in South Australia.

In contrast to outward migration from South Australia, inward migration to South Australia was disproportionately low at 3.8 percent of the national total.

The combination of low inward migration and high outward migration was draining the State's skilled workforce.

The report recommended an intensification of the local training effort, a coordinated approach between employers and the State Government to attract expatriates and encourage then to return to South Australia and the establishment of a single internet site to list employment opportunities within the electronics industry.

The report also recommended that integrated education and training, employment opportunities and career pathways should be developed by education providers, employers and relevant Government agencies.

7.8.8 Southern Adelaide Workplace Survey

A survey undertaken by the Adelaide University, Centre for Labour Research for the South Central Regional Network in 1999 indicated that workplaces in that region expected a range of skill shortages over the following 12 months (Spoehr and Croce, 1999). Almost 33 percent of workplaces surveyed, reported they expect skill shortages in the next 12 months with some sectors reporting a greater percentage than the overall sample proportion. These industry sectors include mining, the accommodation, cafes and restaurants and manufacturing sectors, 45 percent of workplaces surveyed and construction, 37 percent of workplaces. There were also sectors for which recruitment in the next 12 months is not a major issue. These were the agriculture, forestry and fishing and the communications sectors, where none of the workplaces indicated they expect difficulties in recruiting staff, and cultural and recreation, 10 percent of workplaces and wholesale, 14 percent of workplaces surveyed.

Recruitment of personnel in specific occupations, that workplaces expect having difficulties with in the next twelve months, encompass all of the nine major ASCO occupation groups defined above. These occupations are detailed in Table 7.59 and include a wide array of occupations.

Table 7.59: Skill Shortages in the Southern Adelaide, 1999-2000

Source: Southern Adelaide Workplace Survey, Centre for Labour Research

Accountants (qualified & experienced) Manager

Administration Manager - Taxi Depot

Apprentice Cabinet Makers

Apprentice cooper

Assistant Manager

Bar and Waiting Staff

Cabinet Makers

Mechanics

Methanics

Methanics

Methanics

Metal Polishers

Nurses Assistant

Panel Beaters

Cabinet Makers(pine furniture experience) Patternmaker (Engineering)

Carpenters Plasterboard Fixers

Casual Support Worker Plumber

ChefPolishers (Qualified)Chef ManagerPool TechnicianChild Care Worker (trained)PrincipalCommunications RiggerProcess WorkersComposterProduction PrintersConstableProduction Workers

Consultants Psychologist

Contract Admin/Estimators Qualified Tradespersons

Cornice Fixers

Customer service officers

Dental Assistant

Director

Diving Instructors

Driller's Assistants

R & D personnel

Registered Nurses

Registered Plumber

Sales Assistant

Sales Partner

Sales Persons

Exhaust Fitter School Service Officers

Factory Hands Secretary
Fibrous Plasterers Shipwrights
First Class Machinists Shoe Repairers

Fitter and Turners Skilled Insurance Clerk Staff
Flushers Skilled NC Setters & Programmer

Food Handlers

Front of House

Speech Therapist

Gaming

Steel Workers

Gaming Manager

Store Controller

General Medical Practitioner Teacher

Grill Cook Teacher - Specialist
Grower Tradespersons (toolmakers)

Home Economics Coordinator Tradespersons

IT Specialists Trained Child Care Workers

Junior Shop Assistant Waiter Person

Kitchen hand/assistant Waitress/Gaming Staff

LabourersWeldersLand DrillersWheel AlignersLay WorkerWood MachinistsMachinistsWood Polishers

Machinists (in canvas products)

7.8.9 Overview of the skills in the South Australian automotive industry report

A report by Ausrecon consultants for the South Australian Government in 1999 sought to assess and quantify the current skill base and likely skill shortages in the South Australian automotive industry to the year 2002.

The report indicated the following skill shortages in the vehicle industry (see Table 7.60).

Table 7.60: Skill Shortages in the Passenger Motor Vehicle Industry

Source: Ausrecon, 1999

Production

Process workers

CNC operators

Laser operators

Press operators

Production control/schedulers

Large-machine operators

Stores skills

Slitters (foam and metal)

Trades

Reworkers with exceptional metal skills

Maintenance fitting

Fitters and turners

Boilermakers

Electricians special class

Painters

Diecasters

Toolmakers

Welders

Supervisory

Team leaders

Leading hands

Technical

Technical laboratory staff

Electronics/program computer operators

Y2K IT specialists

Metrologists

Engineering

Design draftsmen (worldwide shortage)

Tubing engineers - powder metal specialists

Industrial engineers

Project management engineers

Production engineering specialists

QA engineers

7.8.10 National context of job shortages

It has been demonstrated that there are significant numbers of job vacancies in crucial skill areas in South Australia. However, in the case of many of these skills there are shortages in these areas in other parts of Australia. Hence to obtain these skills from the national labour market, the State will have to compete with other States for workers. There is a national shortage in the information technology area said to be of the order of around 300,000 workers.

Table 7.61: Skill Shortages - IT and T Specialisations, September 1999

Source: Department of Employment Workplace Relations and Small Business

	NSW	VIC	QLD	SA	WA	TAS	NT	AUST
Structured Query								
DB2	D	D					S	
Language (SQL)								
Oracle	D	S	S	S		S	S	✓
Ingres	D			D				
Object Oriented Design	D		S		S			
Database								
CICS							S	
IBM Mainframe							D	
Unix	D	S					S	
AS400		D		S				
Powerbuilder			S	D				
MS Access						S	D	
SQL Server	D	S	S		S	S	D	✓
General Application								
Development								
Java	S	S	S		S		S	~
Java Script		S	S		S			~
C++	S	S	S	S	S	S		V
Delphi			D	S				
Visual Basic	D	D	D	D	S		D	
Networking								
LAN/W							D	
Windows NT							D	
TCP/IP	D						D	
IPX							D	
SNA							S	
Microsoft NT Server							Ď	
Ethernet							D	
Communication								
CISCO Certified	D	S		D	S	S	S	~
Professionals								
Transmission	S							
Mobiles	S	S						
Satellite	S	S						
Manufacture/	~	~						
Production								
Real Time Systems	S				S			
GIS	~				~			
GIS (e.g., Mapinfo)							S	
Publishing/							5	
Graphics/Multimedia								
Advanced Web design	S	S	S		S		S	/

S =Statewide Shortage M =Metropolitan Shortage R = Regional Shortage ✓=National Shortage

Hence Table 7.61 shows that there are national shortages across several areas of information technology Similarly, Table 7.62 indicates in professional occupations several areas of shortage in the State are duplicated in other States. This is also the case in the trades area (Table 7.66).

Table 7.62: Skill Shortages – Professional Occupations, September 1999

Source: Department of Employment Workplace Relations and Small Business

1295-11									00	99
1295-11									98 AUS	AUS
1295-11	CF	IILD CARI	Ξ							
	Child Care	S	S			R	S		~	~
	Coordinator									
6312-11sp	Child Care Worker	S	S		R	R	R	S		~
		<i>IGINEERS</i>								
2124	Civil Engineers	S					_			
2125-11	Electrical Engineer	S	~	~			S	R		V
2125-13	Electronics Engineer	S	S	S			S	R		•
2211 11		CCOUNTAI		C	C	C	C	C	~	
2211-11	Accountant	S	S	S	S	S	S	S	•	V
2222 11		GISTEREL				S	S	C	~	~
2323-11	Registered Nurse	S S	S S	S S	S	S	S	S S	7	/
	Operating Theatre Accident/Emergency	S	S	S	3	S	S	S	7	
	Cardiothoracic	S	S	S		3	S	S	7	~
	Neurological	S	S	S			S	S	•	~
	NeoNatal Intensive	S	ъ	S			S	S	~	~
	Paediatric	S		S			S	S	•	~
	Critical/Intensive	S	S	S	S	S	S	S	~	Ž
	Care	5	Б	Б	Б	5	5	5	•	•
	Renal	S		S				S		
	Aged Care	S		S	S	S	S	S		~
	Oncology	S		Š	٥		J	S		
	Perioperative	2	S	S		R				
	Aboriginal Health			S						
	Community Nursing			S		R				
2324-11	Registered Midwife	M	S	S		S	S	S	/	✓
2325-11	Mental Health Nurse	S	S	S		S	S	S	/	✓
	HI	EALTH SPE	CIALIS	STS						
2382-11,15	Pharmacist		S	S	S	S	S	S	/	~
	(Hospital/Retail)									
2385-11	Physiotherapist		R	R	R		S	R	/	
2385-11	Speech Pathologist		R			R				
2391-11	Diagnostic	S	S	S		S	S		~	~
	Radiographer									
2391-13	Radiation Therapist	S	S	R			S			
2391-15	Nuclear		S							
	Medicine									
	Technologist						_			
2391-17	Sonographer	S	S	S		S	S		•	•
2392-11	Veterinarian					S				
2412 11		CONDARY						C		
2413-11	Secondary Teacher	R	R	S	ъ	ъ		S	V	V
	Manual Arts		S	S	R	R			.,	
	Maths		R	S	R	R			7	
	Physics/Chemistry LOTE		R S	S S	R	R			•	
	Home Economics		S	S S	R	R				
	Information			S S	К	K			~	
	Technology			၁					•	
		THER PRO	FECCIA	NS						
2521sp	Legal Professionals	IIEK I KO	ESSIO	110		S				
2321sp	(Commercial					5				
	Lawyers)									

S =Statewide Shortage M =Metropolitan Shortage

R = Regional Shortage ✓=National Shortage

Table 7.63: Skill Shortages – Trades, January 2000

Source: Department of Employment Workplace Relations and Small Business

ASCO	OCCUPATION	NSW	VIC	QLD	SA	WA	TAS	NT	98 AUS	99 AUS
	META	AL TRAD	ES							
4112-11	Fitter	M	S	S	R					~
4112-13	Metal Machinist	M	S	S	S				/	~
4113-11	Toolmaker	S	S	S	M		S		/	~
4122-11	Metal Fabricator	M	S	S	R		S		~	~
4122-13/15	Welder	M	S	S	R				✓	~
4124-11	Sheetmetal Worker	M	S	S	S		S		/	~
	AUTO	MOTIVI	ETRAD	ES						
4211-11	Motor Mechanic	S	S	S	S	S	S	S	/	~
4212-11	Automotive	S	S	S	S	S	S	S	/	~
	Electrician									
4213-11	Panel Beater	M	S	S	S	S	S	R	✓	~
4214-11	Vehicle Painter	M	S	S	S	S	S	R	V	~
	ELEC	TRICAL/	ELECTI	RONICS	-	~	~			
	TRAD			1011100						
4311-11/13/15	Electrician	- 25		R	R		S			
4312-11	Refrigeration and	S	S	S	S		S		/	~
.012 11	Airconditioning		J	5	2					
	Mechanic									
		TRUCTI	ON TRA	DES						
4411-11/13/15	Carpenter and Joiner	S	S	IDES	S	M				~
4412-11	Fibrous Plasterer	M	S		M	S				1
4413	Roof Slater and Tiler	M	S		171	S				•
4414-11	Bricklayer	M	S	S	S	S				~
4415-11	Solid Plasterer	M	S	5	M	S			~	V
4416-11	Wall and Floor Tiler	171	5		141	S		R	•	•
4431-11	Plumber	M				S		R		
9917-11	Concreter	M				3		K		
<i>))</i> 117-11		OCCUP	ATIONS	1						
3322 – 11	Chef	S	S	S	R	S	S	R	~	~
4512-13	Pastrycook	M	S	S	K	S	S	S	7	7
4512-13 4513-11	Cook	S	3	S	R			3	•	•
4313-11		S D TRADI	- C	S	K					
4921-11	Wood Machinist	S IKADI	20	S	M					~
4921-11	Wood Turner	3		S	IVI					•
4922-11	Cabinetmaker	S	S	S	S		S			./
	Furniture Finisher	3	S S	3	S		S			•
4929-13		R TRAD			3					
4021 11	V			c	C	c	C		.,	.,
4931-11	Hairdresser	S	S	S	S	S	S			
4942-11	Upholsterer	M	S	S	M	S			V	V
4981-11/13	Shipwright/Boat			S						
	Builder									
	& Repairer									

S =Statewide Shortage M =Metropolitan Shortage

7.9 CONCLUSION AND POLICY CONSIDERATIONS

This chapter has demonstrated the difficulties experienced in the South Australian economy and labour market over the last decade which have been the main driver of net interstate migration loss in the State during this period. There are a number of policy relevant recommendations which arise from the analysis. With respect to the economic development of the State the following are relevant.

R = Regional Shortage ✓=National Shortage

To increase investment and employment, important priorities are the following ...

- Developing and implementing an industry and employment development strategy that targets support and investment towards labour intensive high wage, high skill industries in the public and private sectors.
- Generation of higher rates of employment growth through increased public and private sector investment in social and physical infrastructure and research and development.
- Provision of additional support for industry networking and collaboration among small and medium sized firms throughout South Australia.
- Review of government procurement to identify new opportunities for increasing local production through local sourcing of goods and services.
- Provision of support to promote higher rates of research and development investment by sponsoring new industry/university research collaborative relationships.

An important element, indeed the main justification, of a 'Bringing Them Back Home' policy is the existence of job vacancies in the labour market which are a blockage to development in the State. It has been indicated that such gaps in the labour market do exist. Nevertheless, our knowledge of these shortages and other elements in the labour market is still relatively limited. Accordingly there is a need to acquire a better understanding of the State's labour market. Some strategies here might include ...

- Undertake a statewide workplace survey every three years to identify key workplace, employment and training trends and identify current and emerging skill shortages and gaps.
- Develop an agreed framework for the identification of skill shortages and gaps including the development in collaboration with the Federal Government of an Internet based employment and training clearinghouse for the storage and dissemination of state based information on skill shortages and gaps, employment and training trends and issues.
- Resource industry training bodies, regional development organisations and unions to more comprehensively and systematically identify skill shortages and gaps using an agreed framework for data collection and distribution.
- Undertake industry sector reviews of the employment and training implications of the ageing of the workforce.
- A review of the successorship needs of local firms to develop strategies to help firms make a successful transition to new management arrangements or structures.

Nevertheless, there can be no doubt that there are some vacancies among certain skilled areas which are a barrier to development of the State. Meeting these shortages is an important priority for the State. Obtaining these skills from other States and overseas is one strategy which can be effective in the short term. In the medium and longer term, however, it is necessary to address the education and training area to respond to skill shortages. Some recommendations in this area would include ...

- Support and encourage industry to better anticipate and respond to their education and training needs.
- Gear the local education and training system up to better meet skill shortages and gaps.
- Improve working conditions and wages in industries with high turnover and in occupations with high wastage rates.

- Support industry sectors and workplace to introduce 'best practice' employment practices.
- Provide additional incentives and encouragement for the take up of group training and group apprenticeship schemes.
- Increased opportunities for Graduate Placements in the public and private sectors.
- Improve recognition of qualifications gained overseas.

The preceding chapter has indicated the fact that the State economy remains one characterised by relatively high unemployment and underemployment. However, there are a small but significant number of job vacancies in a number of important strategic areas in the State's labour market. A strategy of selectively attracting back former South Australians with skills, experience and training in the areas of job vacancy would thus seem to be justified.

CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

South Australia has experienced its most difficult economic period of the post-war era in the last decade. Accordingly, the recovery of the State economy remains the major priority of Government. The present chapter seeks to bring together the findings of this study regarding the terms of reference and to present a number of recommendations relating to a 'Bringing Them Back Home' policy for South Australia.

At the outset we need to reiterate a statement from earlier in the report. This is that an increase in population must not be seen to be, on its own, a solution to the State's undoubtedly significant economic problems. An increase in population *per se* will not result in increased prosperity. There is no justification for a policy, which simply aims at increasing the size of the State's population without making any reference to its implications for economic development. Accordingly, any policy aimed at attracting more people to South Australia must be carefully targeted. It should not aim at bringing people to the State who ...

- will compete with existing residents for jobs
- will add to the already large numbers of unemployed persons.

Having said this, the argument here is that South Australia *does* need to have a population policy but that policy must be integrated with, and part of, a development strategy for the State. This State population policy should have many components and the present study focuses only on one of these components. The study provides support for the development of a 'Bring Them Back Home' policy in the State and makes a number of recommendations relating to such a policy.

8.2 THE JUSTIFICATION FOR A BRINGING THEM BACK HOME POLICY

The main recommendation of this study is that South Australia should develop a 'Bringing Them Back Home' strategy as part of its economic development plans over the next five years. In the United States, as was indicated in Chapter One, it has become common over the last few years for states which have recorded substantial net outmigration over the last two decades and are peripheral to the main centres of economic and population expansion, to have developed policies of this type. It is important at the outset to summarize what is the justification for a 'Bringing Them Back Home' policy in the State. The reasons for initiating such a policy are as follows ...

• The State has experienced a brain drain of substantial proportions with the large net migration recorded by the State over the last two decades being highly selective of the young adult and highly educated population. This has created a substantial imbalance in the age structure of the State, which will mean that the next two decades will see a large increase of the roles of the older population to that in the working age population. This will present a significant social and economic

- problem for the State so there is a need to attract young adults (and their children) to the State to improve the State's age structure.
- There is evidence of a small but significant shortage of workers in certain highly skilled areas in the South Australian labour market. The inability to fill these vacancies is a significant constraint on economic development and expansion in the State

It is also relevant to point out that the encouragement of internal migration toward a state like South Australia which is peripheral to the main centres of economic expansion in the country is not pushing against overwhelming economic and demographic trends. Indeed it is argued that there are a number of elements, external and internal, to Australia which would seem to be working in favour of a reversal of the net migration losses being experienced in South Australia.

Among the factors the following appear to be especially relevant ...

- In most OECD nations their traditional economic centres are growing more slowly than peripheral centres. Hence in the United States traditional urban metropolises like Chicago, New York, Los Angeles etc. are growing more slowly than cities in the south (Atlanta, Phoenix etc.).
- The massive improvements in information and transport technology in recent years have loosened the ties which have made it necessary for most economic activities to locate in large metropolitan areas to maximise the contact they have with other businesses, raw materials, markets etc. This reduction of the friction of distance has made it possible for economic activities to be located at locations which reduce their overhead costs of rental, congestion, wages etc. They also have resulted in life-style factors becoming more significant in the location decisions of individuals and families since they are less tied to a metropolitan location than in the past.
- The economic restructuring which has occurred in OECD nations like Australia has resulted in a larger proportion of jobs being in activities which do not necessarily need to be located in a downtown location. This includes many of the information technology related industries, tourism etc.
- The last two factors have increased the significance of differentials between cities with respect to housing prices, congestion costs, land cost and the bottom line costs of businesses in different locations. Hence, this has made lower cost locations, which have adequate infrastructure, more competitive in attracting businesses than ever before.
- There is increased awareness of the environmental costs associated with many massive urban concentrations. In the Australian context this is most evident in Sydney with water and air pollution, pressure on available land etc. now becoming evident. Indeed the Premier of NSW has indicated on several occasions that he would like to see population growth in the city stabilise for these reasons (e.g. see *The Australian*, 24 May 1995, p. 10).
- Moreover, it is clear that since the 1996 census a significant change has occurred in the interstate migration influencing the state. ABS interstate migration estimates indicate a substantial reduction in net outflow and a gain from several states while this is supported with labour mobility data collected in the ABS labour force survey. Hence, it could be argued that policy should be 'greasing the rails' or encouraging this movement.

• Evidence from the United States is that over time there has been a shift in the motivations of interstate migrants. Although economic/employment considerations still dominate, lifestyle elements have become more important in motivating interstate migrants. This is partly due to a stronger representation of new retirees among migrants and of course their migration is not constrained by them having to live within commuting distance of a job. However, it is clear that the communication and transport revolution has resulted in increasing numbers choosing where to live on the basis of lifestyle and taking their jobs with them because the jobs are footloose or the worker can telecommute or use communication and transportation developments to communicate with other centres.

8.3 PERCEIVED DISADVANTAGES OF SOUTH AUSTRALIA

The surveys and the focus groups held with employers and employment groups and organisations pointed to the disadvantageous elements of the State, at least those that are perceived by potential returnees and others who could contemplate a move to the State from other parts of Australia. In some of these cases there is a possibility that the perception can be broken down through policy intervention, while in others it is argued that the perceptions in fact do reflect reality and it is counter productive to attempt to deny them. Some of the disadvantages, which came to light, were as follows ...

- There is a perception of Adelaide as a 'backwater'. It needs to be pointed out that changing such a culture is not easy but it definitely can be done, and quite quickly. For example in the early 1970s South Australia was universally seen as being a progressive state. Hence a consistent and substantive policy as presenting the State's strengths is likely to overcome this. One only has to point to the turnarounds which have seen locations like Atlanta in the U.S. reversing its image from being a peripheral backwater to being a progressive and dynamic centre of new age industries and activities.
- Undoubtedly a major part of any strategy to revitalise the State's economy must be to increase the number of professionals and highly trained people who come to the State. In the discussions with several professional groups in this study, a consistent theme was that among some professionals there is a perception that the work available to them in South Australia suffers by comparison with that in some of the other states because ...
 - it is not exciting e.g. if you are a lawyer or accountant, it doesn't involve large companies headquartered in the eastern states.
 - it is of a small scale and not as 'important' as work in other parts of Australia.
 - there are lower salaries than elsewhere.
- What are the types of policies, which are required to overcome the above perception? There is clear evidence that South Australia has increasingly become a branch-office state and some national companies are not even locating a branch office in the State. What can be done to combat this?...
 - One consistent suggestion in the focus groups was that the State Government itself can do more to encourage the development of professional areas like accounting and law in the State in its own business. With increasing levels of contracting out of work from the State Government there were indications in the focus groups that more of this work could be contracted to SA-based professional companies. It is apparently argued that in some cases the Adelaide-

based companies lack the expertise or experience to cope with complex issues. In fact the State can play a role in ensuring that such expertise and experience *is* developed in the State. A review of the extent to which Government contracting out of work can assist in the enhancement of local professional employment is needed. Indeed this work can be seen as something of a leader in this area.

- Another aspect is the extent to which the State can make other interventions to attract national companies in law, accounting etc. to locate in the State to take advantage of the opportunities here. Thus far there has been a concentration on large-scale employers of large numbers of often middle and lower wage level employees. There may well be a role for attracting the small companies of professionals, which would have considerable multiplier effects on the economy.
- Scale in South Australia should not be always depicted as a negative element when discussing recruitment of professionals to the State. Indeed there are some positive elements of a smaller scale. These include exposure to a greater variety of work than would be the case if they were in a large company with high levels of internal specialisation. Another element may relate to more rapid promotion and increased chances to 'stand out' in a company profile.
- South Australia lacks the 'big city' lifestyle, which is available to people in Sydney or Melbourne. Clearly while Adelaide offers a huge variety of life style experiences it is not as varied as or as large a scale as cities with more than three times its population. Such a disadvantage should not be denied. Indeed to some extent it can be turned into an advantage in that the State presents a different but attractive alternative. Moreover, there is a clear 'lifecycle' element in the preference for big city living with it being more popular among young singles and couples. Hence, to some extent young South Australians who spend part of this stage of their lives in large cities may be attracted back once they enter the family formation stage when their lifestyle preferences change somewhat.
- Overwhelmingly, the main disadvantage of the State is perceived to be a lack of the range and type of job opportunities.

8.4 ADVANTAGES OF SOUTH AUSTRALIA

The interviewees and focus groups presented a clear picture of the advantages which the state offers to potential migrants for other states. These are clearly the elements which need to be stressed in policies and programs designed to attract workers from outside the State ...

- South Australia offers a distinctive *lifestyle*. However, it needs to be appreciated that this is the type of lifestyle, which will not apply to all groups. The crucial point involves the identification of groups who are most likely to be attracted by this distinctive lifestyle. The research here indicates that it is a lifestyle which is unlikely to be very attractive to young adult singles and couples. The major advantages lie with young couples in the early family formation stages of the lifecycle. There also could be some attractions to baby boomers, especially those in the employment stage of the lifecycle and recent retirees.
- A great deal of work has been done in South Australia to demonstrate the *lower overheads* which need to be met by companies setting up in Adelaide compared with Eastern State cities. This needs to be targeted also at small scale businesses. In fact these economies may be much more realisable by small scale entrepreneurs located in the Eastern States than large companies.

- Housing is a major advantage, which has been picked up on by the State in its advertising interstate. Clearly lower housing costs are a crucial element and these are especially attractive to young families who are seeking to own their own house. It is not only costs of housing but the type and location of housing which is crucial and more research is needed to identify the type of housing to attract the likely target group of a 'Bringing Them Back Home' program the young family formation group.
- Lower *living costs* need to be emphasised and researched to precisely establish what they are and how far they offset the fact that SA has the lowest income of any mainland state. Realistically how much can a newcomer expect lower living costs to offset any reduction in salary experienced by migration? There would seem to be a strong reluctance among potential returnees to accept lower salaries and this issue needs to be explicitly addressed.
- One of the gilt-edged advantages that the State has, has been described as the 'granny factor'. An unequal advantage that the State has in attracting back former residents to the State is the presence in the State of a network of family and friends of that group. Migration research all around the world stresses that family networks are of crucial importance in shaping all migration. This advantage to potential migrants includes the opportunity to bring up children having regular interaction with grandparents, the chance for grandparental baby sitting as well as the strong social advantages that being close to family and friends offers. In addition to the family and friends, residents here can be an important resource not only in encouraging the migrants to return but also to provide information on potential returnees that can be approached as part of the 'Bringing Them Back Home' program. It needs to be mentioned in passing that a reunion of generations back in South Australia also has some other advantages to the State with reference to the aging of the State's population. Studies of the wellbeing of the elderly in Australia point to the crucial role played by children in maintaining the day-to-day wellbeing of older people. This applies to both physical assistance, but also in combating loneliness. Hence, the more the different generations can by brought together the less the demand placed on government and community provided services.
- An additional factor here is the fact that many of those who have left the State in recent years are second generation Australian-born children of immigrant, mostly European, parents who came to the State in the early post-war era. For some of these groups there may be an important cultural imperative operating to unite the generations ...
 - An issue which arose in the study could be designated the 'old school tie' factor that involved some of the migrants indicating that they would like their own children to attend the school which they did. This would give some credence to the fact that the alumni organisations of South Australian schools (especially private schools) that have branches in Sydney and Melbourne may be incorporated into the 'Bringing Them Back Home' strategy and policy.
 - Education opportunities for children is of fundamental importance to the target group of the 'Bringing Them Back Home' Policy young family formation groups. If the State is able to demonstrate that it is able to offer a superior range or quality of opportunities or more ready access to these opportunities this would be a strong selling point to the group.

8.5 MAIN FEATURES OF A BRINGING THEM BACK HOME POLICY

The present study recommends that the State initiate a 'Bringing Them Back Home' program. This program should meet the following conditions ...

- It should seek to fill immediate skill shortages, which have been identified in the South Australian labour market.
- It needs to be integrated with a number of other initiatives involved in the economic development strategy with the State.
- It should be consciously and specifically targeted toward people in the family formation age categories.
- It should be focussed on those with a strong attachment to the State, predominantly people who have lived here previously and have networks within the State.
- It should not be the focus for substantial public investment of funds and it must be recognised that the numbers involved will not be massive but be in key areas which will have significant multiplier effects.
- It needs to be integrated with other attempts to attract businesses and people to the State including the efforts aimed at businesses in other states and those involved in attracting immigrants from overseas.
- We believe that there is little value in targeting the policy at younger adults such as
 recent graduates in South Australia. It is clear that there is a growing culture among
 this group to travel and seek experience elsewhere. Indeed such experience may
 make them even more valuable to the State if they can be encouraged to return.
 Such returnees not only come back with enhanced skills but also enhanced networks
 of contacts of value to their employers and businesses in the State.
- The program should be integrated with a policy, which sees South Australia become 'The Family Friendly State' as is discussed in a later section. We believe such a policy builds upon strengths already in the State and would be a unique attraction to the recent family formation groups not only who were born in SA and moved away but others at this stage of the lifecycle who are interstate.

Programs to bring people back to the State need to emphasise the advantages of South Australia for groups in the family formation stage of life. This will be strongly related to the designation of the State as 'The Family Friendly State'. These policies could be developed by the State Government alone or in co-operation with other groups especially businesses, regional councils, local government, universities etc. These policies would emphasis the positive attributes of the State which are likely to be most meaningful to the target lifecycle stage group including ...

- Housing prices, styles, variety, quality and affordability
- Lifestyle
- Transport and accessibility
- Educational opportunities and quality
- Environment for raising children

What should be the precise elements to be involved in a Bringing Them Back Home program? These can involve a number of relatively straightforward initiatives but it is argued that no new bureaucracy be created to deal with it. It is believed it can readily be absorbed within existing structures. It should make substantial use of the internet. The following initiatives are *recommended* ...

- There should be a *database* established of potential returnees. This needs to be maintained and regularly updated. The sources of names should be as follows...
 - Alumni records of graduates going out of the State from the three universities and TAFE should automatically be included/
 - Alumni records of secondary schools, which indicate former students who have left the State.
 - There should be regular campaigns and establishing of a 1800 service for families to nominate people for the list.
 - There needs to be a facility on the program website (see later) for people to self nominate and to post a CV (in a standard format) on the site.
- There needs to be a program *website* established which contains details about the program but also maintains a list of job opportunities in the State. There should be a facility for key employers to place job vacancies on the site and for job seekers to post their CV on the site. The website would be open to all interested persons and be a way of presenting to the market place a range of important messages relating to the program but also in presenting South Australia as 'The Family Friendly State'.
- There is a need to establish a *Link Agency*, which can help match potential returnees with opportunities in South Australia, especially in employment and real estate services. These agencies would be similar to tourism offices which provide a 'shopfront' to link outsiders with the opportunities within the State.
- The data base can be utilised to establish a *mailing list*. This would involve people being approached to see if they would like to receive regular mail-out of once each 6 months. This can include promotional material about the State but also bulletins of job and housing opportunities in the State.
- Meetings of expatriate South Australians can be convened in key locations interstate, especially Sydney, Canberra and Melbourne to promote the 'Bringing Them Back Home' program.
- In order to combat the loss of some of the brightest young people from the State there needs to be a *scholarship* plan for undergraduates which will keep the best Year 12 achievers in the State.
- There is a need for a special targeting of those among expatriate South Australians who are *employers or operators* of businesses. These should be a target of some of the package of incentives currently made available to big employers establishing in South Australia.
- Thus far the entire focus of attention has been on attracting young families to the State and we believe they should be the main focus of a Bringing Them Back Home program. However, two other groups may bear some investigation as to programs of attracting people to the State ...
 - baby boomers who are in the 'empty nest' stage of the lifecycle,
 - recent retirees who are not tied down to living near a workplace.

In the case of both groups they have been an effective 'pump primer' of economies in some areas and they could be an element in a program of 'Bringing Them Back'. In these cases there may be more possibilities than in other parts of the program to focus activity on centres outside of Adelaide.

8.6 SOUTH AUSTRALIA: 'THE FAMILY FRIENDLY' STATE

In Chapter Two it was argued that there would be a number of advantages in the South Australian Government adopting a policy of becoming 'The Family Friendly State'. In addition to the fact that the family is the most basic social unit in Australian society and that none of the other states has focussed on this dimension in presenting themselves to the outside world it is argued that this policy would have a number of advantages from a population growth perspective ...

- The adoption of family friendly policies was shown in Chapter Two to be associated with a stabilisation or even a slight increase in fertility. This would have significant dividends for reducing the ageing of the population in the State.
- This could prove an important element of attraction to the target group of the 'Bringing Them Back Home' policy young couples in the family formation ages who are likely to be strongly influenced by the orientation to providing a supportive and fulfilling environment for families.
- This also may be influential in attracting other residents of the other states to the State. It would give the State a new and different aura of progressiveness and attractiveness and do a lot to dispel the 'backwater' perception discussed earlier.

It should also be pointed out however that the enhancement of South Australia's family friendly environment can be justified not so much from its undoubted advantages for increasing population growth but mainly because it improves the situation of residents of the State, especially women and children. Moreover, it builds upon the strong tradition in the State which goes back to the colony being the first to introduce universal suffrage for women.

What is involved in becoming a 'family friendly' State? To some extent it does not involve necessarily a massive change in policies but it does in the attitudes taken in the private and public sectors. Employers in the State would be important partners in the family friendly initiative and they should be involved both in the formulation of the policy and in developing the programs associated with it.

Clearly many of the policies and programs which most can be described as influencing the degree of family friendliness of the State are in fact federal policies and programs and there has been a considerable amount of recent commentary which suggests that there has been a decline in the degree of family friendliness in Federal Government policy in recent times (McDonald 2000b). Nevertheless, there is scope for a State Government to supplement and add to federal initiatives and programs to enhance the 'family friendliness' of the societal structure.

McDonald (2000b) has presented a 'tool box' of public policies to influence fertility and several of these are amenable to some involvement of the State Government. He classifies these policies into three separate types ...

- Financial incentives
- Support for parents to combine work and family
- Broad social change supportive of children and parenting.

The first category of initiatives involves governments providing periodic cash payments for each child; lump sum payments or loans on the birth of a child; tax rebates, credits or

deductions; free or subsidised services or goods for children (e.g. in education, medical services etc.) and housing subsidies. Most of these financial incentives are tied to the number of children which a couple have. The scope for the State Government to develop and initiate policies of this type is quite limited. For example it has no power to intervene in the taxation system. Moreover, much of the funding for housing, education, health and other activity carried out by the state is provided on a formula basis from the Federal Government via the Commonwealth Grants Commission. Nevertheless, there may be some small scope for reducing the costs of children to parents in some areas.

The second category of policies would seem to be more amenable to State Government involvement. These are initiatives which facilitate women combining having children with having a fulfilling and total career. This does not mean women (and men) cannot choose to focus on one or the other but as was argued earlier the current system largely supports those who do one or the other and not women who attempt to combine work and family raising. The policy levers identified by McDonald (2000b) here involve the following elements ...

- Maternity and paternity leave
- Child care provision
- Flexible working hours and short term leave for family related purposes
- Anti-discrimination legislation and gender equity in employment practices
- Having reliable work hours, which mesh well with family responsibilities.

Here there would seem scope for a government-employer pact at the state level to produce 'family friendly workplaces' in the State. While many of the owners of businesses are branches of interstate and international companies and there are many national award regarding work conditions it should be possible to forge an alliance between government, employers and worker's organizations to achieve more family friendly workplaces. The State Government can take a lead in this by becoming a more family friendly employer itself. It may be possible initially to involve only a handful of very large employers to demonstrate what can be done. The universities for example would be a good choice as would large employers like General Motors Holden, Mitsubishi etc. The point that can be made to them is that there would seem to be major dividends for them in these initiatives – a more committed and reliable workforce, ensuring that talented and trained women remain in the workforce etc.

It may involve the State reviewing its ability to assist in the area of child care provision in workplaces or providing incentives for employers to initiative family friendly practices and support in designing and implementing such practices. There is likely to be some extra expenditure required of government in this area but it should reap considerable dividends for the State. The concept of 'family friendly workplaces' would very much place the State at the most progressive edge of workplace practices and could well prove an attractive selling point for businesses and people contemplating coming to South Australia.

The third category of public policy initiatives identified by McDonald (2000b) are what he designates 'broad social change supportive of children and parenting' and it appears as though the State could play an important role here. The types of initiatives he identified are

- Employment initiatives
- Child friendly environments
- Gender equity

- Marriage and relationship supports
- Development of positive social attitudes toward children and parenting.

There would seem a great deal of scope for State involvement here with initiatives being based around South Australia being designated the 'Family Friendly State'. Clearly the initiatives here overlap with the workplace initiatives discussed previously. The assistance of women keeping in the workforce is an important element. The key in such a policy is ensuring that there is a family centredness to the day-to-day life of the State.

It is not the purpose here to develop and expand upon a 'family friendly' policy for South Australia but it clearly involves building upon existing initiatives in government and the community generally.

8.7 LINKAGES WITH INTERNATIONAL MIGRATION

Chapter Two examined the level of international migration to and from South Australia in recent years and explained how the South Australian government had taken advantage of Department of Immigration and Multicultural Affairs regional migration programs. A number of points need to be made in this chapter with respect to the linkages between a Bringing Them Back Home policy and international migration ...

- There remains a place for the State to be involved in schemes to attract international migrants to South Australia. However, it needs to be recognised that in the short term the numbers are likely to be relatively small given the current economic situation and the fact that the State has only small numbers of recent immigrants to serve as anchors for the social networks which are a major determinant of where immigrants settle in Australia.
- The Bringing Them Back Home program needs to be integrated with efforts to encourage international migrants. For example both programs can be expected to target similar patterns of skills among newcomers and entrepreneurs.
- The experience in the United States is that once a flow of internal migrants is created to a centre it often acts as a 'pump primer' to attract international migrants to that centre (Newbold 1999).

In the course of the study we received some enquiries from South Australians who had children and other family members currently living overseas and who were interested in returning to South Australia. This raises the issue as to whether the Bringing Them Back Home policy should have an international component ie whether the database should include former residents living outside of Australia. In this respect it should be noted that Australians are leaving the country on a long term or semi-permanent basis at a rate unprecedented in our history (Hugo 2000). This is to be expected in a globalising world where labour markets are often international. Many of the same principles apply to this group as we have seen for expatriate South Australians in other states. It would seem possible and perhaps advisable for some initiative at a national level to facilitate the return of skilled expatriates. Their experience, international connections and skills could prove a major asset to the country. Some nations (e.g. Singapore, Malaysia, Pakistan, Korea, Taiwan, China) have established programs to bring expatriates home. In the present context we recommend that consideration be given to having an international component to the South Australian Bringing Them Back Home strategy.

8.8 CONCLUSION

South Australia has experienced a decade of economic difficulty and this has had a number of consequences of which an upswing in net interstate migration loss has been one. This loss has had negative consequences both economically and demographically. Economically the loss has been selective of young well-educated people the lack of whom has been a constraint on the State's development and is reflected in job vacancies in some key professional, managerial and skill areas. Demographically the ratio of people in the key working age groups is the smallest of all the states and threatens to worsen substantially. The imbalances thus created are an important social and economic problem. While zero population growth and slow growth does not necessarily mean lower prosperity the nature of the evolving age structure in the State is an issue of concern. Even if the State would have a policy of aiming toward eventually achieving a demographically stable population so that it ceases to grow but retains a balanced age structure there is a need to increase present population growth in order to achieve that structure. There are several mechanisms whereby this can occur ...

- Increased fertility, or at least stabilising it at the present levels
- Reduced internal migration loss or perhaps even reversing the flow
- Increased intake of overseas immigrants.

This report has touched on each of these strategies but focussed on the second. Within this, it has presented material which suggests a policy to attract back to the State some of those who left it as younger people. States in similar situations to South Australia in the United States are experimenting with similar programs.

The Bringing Them Back Home program should be focussed on filling strategic skill shortages which are currently a constraint on development in the State. The policy is unlikely to involve large numbers of people but can make a difference because of its strategic targeting. It needs to be integrated with State Development Strategies and initiatives as well as other programs with similar objectives such as in training and international migration. It should be targeted at people with skills in demand, strong linkages with South Australia and in the young family formation years. The recommendations presented here do not make massive new demands on funding and should be able to be undertaken within the existing bureaucracy.

APPENDIX A

The essential details of the plan were reported in *The Advertiser*, Saturday 29 April 2000:

Skilled workers and south Australian university graduates who are working interstate will be targeted by a new program aimed at enticing them back home. The State Government will consider offering financial incentives including relocation costs and long term loans as an inducement.

The "Bring Them Back Home" program is the first of its type in Australia. The government is developing an overall marketing strategy to attract specific groups which have the most potential to migrate to the state. One of the first target areas will be Sydney's western suburbs where, Premier John Olsen says, people are "fed up with high real estate process and congested city living". Mr Olsen said from Wellington, where he was attending an immigration ministers conference yesterday, that until now SA had concentrated its efforts on attracting skilled overseas migrants with interstate migration "a largely untapped resource". "The reality is other state governments do not have policies aimed at increasing interstate migration", he said. "I want SA to be the first off the blocks. The positive changes in the state's economic fortunes over the past three years to four years and the outlook for the next two to three provides us with an idea opportunity to develop a strong marketing strategy to substantially lift our interstate migration levels""

The Geographical and Environmental Studies Department at Adelaide University has been commissioned to undertake a study to develop strategies aimed at increasing the number of skilled migrants in areas where there are shortages. The Department is considered the pre-eminent demographic research centre in Australia. One of its other terms of reference includes which states should be targeted. Mr Olsen is keen to get the "Bring Them Back Home" plan into operation as soon as possible because Victoria and Tasmania are considering similar campaigns. The study, expected to cost \$50,000, will take about eight weeks. Mr Olsen said recent international trends showed there had been substantial movements of people and businesses away from large cities towards midsized cities such as Adelaide. So the time was tight for this sort of move.

He said the Government also was aware of the concerns of parents who had seen their children leave SA for interstate career opportunities. "We already know they are the very people most likely to migrate back to SA". He said. "They are already aware of the advantages of living here, our cheaper home and land prices, our lifestyle... What we need to look at now is just what other initiatives should be considered as part of a strategy to make them seriously think about calling SA home again". The number of people leaving SA for interstate has outstripped the number of people arriving in SA for 20 years. Outflows have exceeded inflows by about 2,600 a year with the number of people arriving averaging 25,400. In recent years, departures from SA have fallen and arrivals increased but the Government wants a new marketing program to narrow this gap even further.

Greg Kelton, "Premier targets skilled workers who have left, *The Advertiser* Saturday 29 April 2000, Page 1 and Page 8.

On Wednesday 3 May 2000, the Premier held a press conference at the National Key Centre for Social Applications of GIS, Adelaide. The following day, *The Advertiser* reported:

A toll free number has been set up by the State Government so parents of graduates and skilled workers living interstate can tell the Government where to find them. The toll free number and a special website are part of the Government's "Bring Them Back Home" strategy aimed at getting professionals and tradespeople to return to SA to live. Under the strategy, the Department of Geographical and Environmental Studies at Adelaide University has been commissioned to develop options for the program over the next three months. The options could include financial incentives such as relocation costs. Premier John Olsen said yesterday SA had a skills shortage in areas such as information technology. "Child care workers, accountants, nurses, pharmacists, physiotherapists and secondary school teachers particularly maths and physics and chemistry are also in strong demand", Mr Olsen told Parliament. "We have vacancies for fitters and tool makers, motor mechanics and panel beaters, electricians, carpenters, bricklayers, chefs and hairdressers. We have major international companies looking at further expansion and investment. One of the difficulties we have had in the past is the available skilled resource base to meet their demand and, given the mobility of international capital, they will locate where the human resource base is available to them".

THE opposition questioned the campaign in Parliament yesterday, with Opposition jobs spokesman Michael Wright asking the Premier to explain why a university graduate living in Adelaide and dozens of other South Australians in her position could not find a job. He cited the case of Ms Kerry Murray, who had been back in Adelaide for five months after working overseas. She had explained in letters to the Government and the Opposition that the only work she had been able to secure was three weeks temporary work that finished before Easter. Mr Wright read the letter from Ms Murray, in which she said: "Mr Premier, if I were to move to Sydney, would you bring me back to a position that I could take now?"

Mr Olsen said the Government would follow up her letter and try to assist Ms Murray to find a job. "What the Opposition conveniently overlooks is that, as we rebuild the economy, there are some industry sectors in trades and professions which have vacancies while there are some which don't", he said. "What we are seeking to do this with this strategy is look at where the shortages are". The toll free number is 1800 010 466 while the website is www.ministers.sa.gov.au/premier/news.html or www.ministers.sa.gov.au/premier/news.html or www.ministers.sa.gov.au/premier/news.html or www.ministers.sa.gov.au/premier/news.html or

Greg Kelton, "Phone to lure them home", *The Advertiser* Thursday 4 May 2000, Page 28.

APPENDIX B

QUESTIONNAIRE

Introduction

The answers provided in this questionnaire will assist in preparing our report for the South Australian government on factors influencing interstate migration to and from South Australia.

Who should respond to this questionnaire?

The questionnaire is intended for persons who were residents of South Australia prior to commencing their studies at Adelaide University, and who subsequently moved interstate. If you fall into this category, we would like you to participate in this survey and answer the questionnaire. **Please proceed to Question 1**.

However, if you came to South Australia from an interstate location specifically for the purpose of studying at Adelaide University, and returned to your home State at the completion of your studies, you are not eligible to participate. If you are in this category, could you mark the box \square and return your questionnaire in the reply paid envelope, please?

If you did **not** tick the box in the previous sentence, please proceed to Question 1.

1. What year did you leave South Australia?	
2. What was your age at the time you left South Australia?	
3. Gender Male Female 4. When you left South Australia, what was your family an One person household Married or de facto couple only Married or de facto couple with dependent(s) only Married or de facto couple with dependent(s) and others Married or de facto with others One parent with dependent(s) only One parent with dependent(s) and others One parent with others Some other group of related people Two or more unrelated people Other, please state	d household situation?

5. In which suburb or town did you live at the time you left South Australia

6. What was the postcode of that sub	ourb or t	own?
7. What was your employment status Employed (Full time) Employed (Part time) Employed (Casual) Unemployed Unemployed but looking for work Not in the workforce Student Retired	s at the t	ime you left South Australia?
8. If you were employed at the time	you left	South Australia, what was your occupation?
9. In this occupation, were you: Working for wages or salary? In your own business and employing In your own business but not employ Other (please state)		
10. What is your level of income at the Less than \$25,000 per annum \$25,000 - \$30,000 per annum \$30,001 - \$35,000 per annum \$35,001 - \$40,000 per annum \$40,001 - \$45,000 per annum \$45,001 - \$50,000 per annum \$50,001 - \$55,000 per annum \$55,001 - \$60,000 per annum \$60,001 - \$65,000 per annum \$60,001 - \$65,000 per annum	he time	you left South Australia?
· · · · · · · · · · · · · · · · · · ·	•	left South Australia AND you had been at was your most recent occupation?

12. At the time you left South Austra Postgraduate degree Postgraduate diploma Bachelor degree Undergraduate diploma Associate diploma Skilled vocational (including trade) Basic vocational Other	ılia, wha	at was your hi	ghest educational qualification?
13. Before leaving South Australia, owned, or being purchased, by you Rental flat/unit Rented house Parent's dwelling Other, please state	was you:	r accommoda	tion:
14. Please state the main reasons for (Respondents may check			
Interstate transfer	as many	арргоргіасс	
Promotion in current job			_
To begin a new job			ā
Employment unavailable in occupati	on of ch	noice	
No employment available in SA	.011 01 01	10100	
To seek work			
To establish, relocate or expand a bu	isiness		ā
Due to retrenchment, redundancy			
Partner's employment			
For higher salary			
For higher non-salary benefits			
For more hours of work			
For promotional/career advancemen	t		
Marriage/partnership			
Separation/divorce			
Nearness to family/friends			
Education			
Lifestyle			
Environment			
Climate			
Buy own home			
Better (Larger or smaller) dwelling			
Lower housing costs			
Lower costs of living			
Retirement			
Health Other places state			
Other, please state			

15. To which State did you move?	
16. Please state the suburb or town to which	you moved, and its postcode.
17. Have you remained at that location since Yes	e?
18. If no, how many residential moves have	you made since leaving that location?
19. Are you still in the State to which you me Yes □ No □ 20. If no, in which State are you presently li	
, , , , , , , , , , , , , , , , , , , ,	
21. Is your employment status the same now (see your answer to Question 7)? Yes No	v as it was at the time you left South Australia
22. If no, how has your employment status l	nas changad
Now Employed (Full time)	
Now Employed (Part time)	
Now Employed (Casual)	
Now Unemployed	
Now Unemployed but looking for work	
Now Not in the workforce	
Now a Student	
Now Retired	
23. If you are currently employed, what is y	our occupation?
24. In your present occupation, are you wor Full-time Part-time Casual Casual	king:
25. If part-time or casual, how many hours	do you work each week?

26. What is your present level of inc	ome?
Less than \$25,000 per annum	
\$25,000 - \$30,000 per annum	
\$30,001 - \$35,000 per annum	
\$35,001 - \$40,000 per annum	
\$40,001 - \$45,000 per annum	_
\$45,001 - \$50,000 per annum	
\$50,001 - \$55,000 per annum	
\$55,001 - \$60,000 per annum	
\$60,001 - \$65,000 per annum	
More than \$65,000 per annum	
27. What is your present family and	household situation?
One person household	
Married or de facto couple only	
Married or de facto couple with depo	endent(s) only \Box
Married or de facto couple with depo	
Married or de facto with others	
	<u> </u>
One parent with dependent(s) only	
One parent with dependent(s) and ot	
One parent with others	
Some other group of related people	
Two or more unrelated people	
Other places state	
Other, please state	
Other, prease state	
-	adation in which you live
28. Please state the type of accommo	odation in which you live
28. Please state the type of accommod House □	odation in which you live
28. Please state the type of accommod House	odation in which you live
28. Please state the type of accommod House □	odation in which you live
28. Please state the type of accommod House	odation in which you live
28. Please state the type of accommod House	odation in which you live
28. Please state the type of accommod House	odation in which you live ocess of buying, the dwelling in which you currently
28. Please state the type of accommod House	
28. Please state the type of accommod House	
28. Please state the type of accommod House	ocess of buying, the dwelling in which you currently
28. Please state the type of accommon House	ocess of buying, the dwelling in which you currently
28. Please state the type of accommon House Flat/unit Apartment Other (please state) 29. Do you own, or are you in the prolive? Yes No 30. Since moving from South Austrabetter off or the same financial position.	ocess of buying, the dwelling in which you currently
28. Please state the type of accommod House	ocess of buying, the dwelling in which you currently
28. Please state the type of accommon House Flat/unit Apartment Other (please state) 29. Do you own, or are you in the prolive? Yes No 30. Since moving from South Austrabetter off or the same financial position.	ocess of buying, the dwelling in which you currently
28. Please state the type of accommod House	ocess of buying, the dwelling in which you currently
28. Please state the type of accommon House	ocess of buying, the dwelling in which you currently
28. Please state the type of accommon House	ocess of buying, the dwelling in which you currently dia, would you say that you are now in a worse off, ion?
28. Please state the type of accommod House	ocess of buying, the dwelling in which you currently dia, would you say that you are now in a worse off, ion?

32. Do you plan to return to South Yes No Undecided	Australia to live?
33. If yes, what are the main reason (Respondents may check	ns? as many appropriate responses as they wish)
Family in South Australia	
Friends in South Australia	
Environment	
Lifestyle	
Climate	
House and land prices	
Lower costs of living	
Job transfer	<u> </u>
Promotion	
Higher salary	
Non-salary issues	
New job	
Partner's employment	
To seek work	
To establish, relocate or expand a b	
Retrenchment, redundancy	
Retirement, health Marriage/partnership	
Separation/divorce	
Education	ū
Please list any other relevant factor	_
Trease list any other relevant factor	(3)
34. If you plan to return to South A	australia, when will it occur?
35. If you plan to return to South A	ustralia, what occupation(s) would you seek?
36. If you plan to return to South A	ustralia, what level of remuneration would you seek?
Less than \$25,000 per annum	
\$25,000 - \$30,000 per annum	
\$30,001 - \$35,000 per annum	
\$35,001 - \$40,000 per annum	
\$40,001 - \$45,000 per annum	
\$45,001 - \$50,000 per annum	
\$50,001 - \$55,000 per annum	
\$55,001 - \$60,000 per annum	
\$60,001 - \$65,000 per annum	
More than \$65,000 per annum	

decision? (Respondents may check as many appropriate responses as they wish) Employment opportunities are better where I am Salary levels are not as good in SA Promotion opportunities are better here Business opportunities are better here Partner's employment is here Higher salary where I am now Marriage/partnership keeps me here Separation/divorce keeps me here Nearness to family/friends where I am Education Lifestyle Environment Climate Established in current location Better housing than in South Australia Cost of re-locating back to SA Plan to retire in present location Other, please state 38. What South Australian government initiatives would you like to see introduced to encourage you to return to South Australia? Please be as precise as you wish.

37. If you do not plan to return to South Australia, what are the main reasons for this

Thank you, again, for participating in this survey. We appreciate very much the time you have taken to provide the information. Please arrange now to forward the questionnaire to us in the Reply Paid envelope provided or by fax (08 8303 3498).

APPENDIX C

1992 South Australian University	Graduates - Destination	by Field of Study

as number of survey responses																	
Field of Study	CANBE		SYDNE		MELBO		ADELA		PERTH	REST	DARWI		BRISBA		HOBAR		Eastern
	RRA	OF	Y	OF	URNE	OF VIC	IDE	OF SA		OF WA	N	OF NT	NE	OF	T	OF TAS	seaboar
		ACT		NSW										QLD			d
AGRICULTURE	1			5	1	1	13		1	. 5	1	2	2	1			1
ARCHITECTURE			1	l			13										1
BUILDING AND RELATED STUDIES			1	l	1		40							1			2
BUSINESS STUDIES	6		9		12	1	529			2	. 4	. 2	2 3	3	2	. 2	24
CHEMISTRY			2	-	1		19						1				4
COMPUTER SCIENCE	1		2	2	1		85										3
DENTISTRY	1			1		1	14	4	1		1			1			0
ECONOMICS	10		1 1	l	2		60										3
EDUCATION - INITIAL	3		1 3							1	. 1	8				1	8
EDUCATION - POST/OTHER	6		1 40	5 35							5	7	7 17	37	'	2	
ENGINEERING	5	3	3	3 6			116			. 7		1		1		2	5
GEOLOGY			1	l	2		11			! 3							3
HEALTH - OTHER			3			2								1	. 1	2	
HUMANITIES	4		9) 5	5	3	242	33	3	3 2	. 2	. 7	7	2	. 2	- 1	14
LANGUAGES							32										0
LAW	1		1	l	4		38	2					1				6
LAW - OTHER							71						1				1
LIFE SCIENCES	3		2	2 4	. 1	2			1	. 1		1		1		1	3
MATHEMATICS	1						20				1						0
MEDICINE				5 1	3		108		1					1		2	8
NURSING - INITIAL			1	1 1			155										1
NURSING - POST BASIC							13							1			0
PHARMACY				2			23										0
PHYSICAL SCIENCES	1				2		42			1	. 1	1				2	2
REHABILITATION	3		2	2 7		4		23		1	. 1	2	2 3	1		3	9
SOCIAL SCIENCES			1	Į.	2		37								1		3
SOCIAL WORK				3	1	1	109						1	. 1			2
SURVEYING							8										0
URBAN PLANNING							14	6					1				1
VETERINARY SCIENCE																	0
VISUAL AND PERFORMING ARTS			3		1	2					1	1					4
TOTAL	46		5 90	5 91	62	51	2733	525	12	23	18	32	25	60	6	18	187
TOTAL REMAINED IN SA	3258																
TOTAL LEFT SA	550																
TOTAL ALL	3808																

1996 South Australian University Graduates - Destination by Field of Study

as number of survey responses	nation by Field	a or Su	<u>iav</u>															
Field of Study	CANBER	DEC	CVD	DEC	ME	DEC	ADE	DEC	DED	DEC	DAD	DEC	DDI	DEC	нов	DEC	Eastern	ESB
Field of Study	RA	T	NEY		LBO		LAID		TH	T	WIN		SBA		ART		seaboard(ca	(Rest Of
		OF		OF	URN		E	OF		OF WA		OF	NE	OF		OF	pital cities)	State+A
		ACT		NS W	E	VIC		SA		WA		NT		QLD		TAS		CT)
ACCOUNTING			2			1	17	22	1	1		11	2				7	3
AGRICULTURE				2		3	8	28		4		1					C	5
ARCHITECTURE			3		2		41	4						1			5	1
BUILDING AND RELATED STUDIES								1									C	0
BUSINESS STUDIES			6	2	36	4	224	11	2		7	1	1	6			43	12
CHEMISTRY			3				10	27	1	1							3	
COMPUTER SCIENCE	1		3				20		1								3	1
DENTISTRY	2		4			1								1	. 2		5	6
ECONOMICS			3		3		12										6	
EDUCATION - INITIAL	18		4	12	10	13	420	128		6		1	4	12		5	18	55
EDUCATION - POST/OTHER	8	2	72	58	6	8	221	105		1		1	15	36	, 2		93	
GEOLOGY								1		15		1					C	
HEALTH - OTHER						2		10	1			1					C	
HUMANITIES			9	4		2	187	34	11	1	15		2	7			11	
LANGUAGES					1												1	0
LAW	20	1					15										C	
LAW - OTHER								8				2					C	
LIFE SCIENCES	1		3	1		1	8	15	2			3	1	3			4	
MATHEMATICS																1	C	
MEDICINE		2											1				3	
NURSING - INITIAL			1			3		48				1		12			3	
NURSING - POST BASIC			9	7		10		103		1		1	3	22		2		
PHARMACY					1	1	25										1	
PHYSICAL SCIENCES			2		5	1		2									7	
PSCHOLOGY	1		3				1232	21									3	
REHABILITATION			3			12	42	5		2					10	13		
SOCIAL SCIENCES			2			1		15	1	2				4			2	
SOCIAL WORK				11		2	77	1		1							C	
SURVEYING								_									C	
URBAN PLANNING								2									C	
VETERINARY SCIENCE																	C	
VISUAL AND PERFORMING ARTS			1		_	1	194	3			_			2		_	1	
TOTAL	51		135	120	77	66	3068	594	20	35	22	24	29	106	14	21	241	347
TOTAL REMAINED IN SA	3662																	
TOTAL LEFT SA	724																	
TOTAL ALL	<u>4386</u>																	

1999 South Australian University Graduates - Destination by Field of Study

as number of survey responses	ation by	rieia oi s	<u>stuay</u>															
Field of Study	CANB ERRA		SYDN EY	REST OF	MELB OURN			REST OF SA		REST OF	DAR WIN	REST OF NT		REST OF	HOBA RT	REST OF	Easter n	ESB (Rest
	EKKA	ACT	1.1	NSW	E	VIC	AIDE	OF SA		WA	*****	OF MI	AINE	QLD	K1	TAS	seaboa rd(cap	Of
																	ital	ACT)
																	cities)	
AGRICULTURE						1	3	39	1	. 1		3			l	1	0	2
ARCHITECTURE	4	ļ	4		1		6					5					5	
BUILDING AND RELATED STUDIES			5				6	4									5	
BUSINESS STUDIES	2	2 2	2 43	4					5			2	23	13	3	2		
CHEMISTRY			4		3		2			1							7	
COMPUTER SCIENCE			5					1									5	0
DENTISTRY				3		2								:	3 1		0	
ECONOMICS			1		3												4	
EDUCATION - INITIAL	1			15								2		:		! 7		
EDUCATION - POST/OTHER			18		7					1			2		3		27	
ENGINEERING			4	. 5			100		1	. 2		3	1			1		
GEOLOGY					2												2	
HEALTH - OTHER			1								8		2				8	
HUMANITIES	14	ļ	13	2					4	3		3	1	4	1 1	. 2		
LANGUAGES					2		1214										2	
LAW	3		1		35												36	
LAW - OTHER	4	ı					7										0	
LIFE SCIENCES			2	. 1	1	1				1							3	
MATHEMATICS							12						1				1	0
MEDICINE				8								24					2	
NURSING - INITIAL			2		2		143				16						4	
NURSING - POST BASIC	35		1	6	10					7	10	2	- 1	2	1 18	3 2		
PHARMACY	5	5				1		2									0	
PHYSICAL SCIENCE						2											0	
PHYSICAL SCIENCES								4									0	
REHABILITATION			8	9	4	5				. 1		1	4	. (5 1	. 6		
SOCIAL SCIENCE							81	21									0	
SOCIAL WORK	6		1	1			27	12		2		1			1		1	7
SURVEYING		1	1 1														1	1
URBAN AND REGIONAL PLANNING									1								0	
VETERINARY SCIENCE																	0	
VISUAL AND PERFORMING ARTS			1	4			101	2					1				2	
TOTAL	74		3 115	90	101	61	3007	639	30	26	34	46	36	8) 24	21	252	308
TOTAL REMAINED IN SA	3646																	
TOTAL LEFT SA	741																	
TOTAL ALL	<u>4387</u>	<u> </u>																

Employment Destination of South Australian University Graduates, 1992, 1996 and 1999 by number and percentage of survey responses

	1992	2	1990	6	1999			
	Number	Percent	Number	Percent	Number	Percent		
Adelaide	2733	71.77	3381	73.72	3007	68.54		
Remainder of SA	525	13.79	543	11.84	639	14.57		
South Australia	3258	85.56	3924	85.56	3646	83.11		
Melbourne	62	1.63	71	1.55	101	2.30		
Remainder of VIC	51	1.34	54	1.18	61	1.39		
Victoria	113	2.97	125	2.73	162	3.69		
Sydney	96	2.52	125	2.73	115	2.62		
Remainder of NSW	91	2.39	114	2.49	90	2.05		
New South Wales	187	4.91	239	5.21	205	4.67		
Brisbane	29	0.76	28	0.61	36	0.82		
Remainder of QLD	60	1.58	96	2.09	80	1.82		
Queensland	89	2.34	124	2.70	116	2.64		
Perth	12	0.32	20	0.44	30	0.68		
Remainder of WA	23	0.60	34	0.74	26	0.59		
Western Australia	35	0.92	54	1.18	56	1.28		
Hobart	6	0.16	12	0.26	24	0.55		
Remainder of TAS	18	0.47	20	0.44	21	0.48		
Tasmania	24	0.63	32	0.70	45	1.03		
Darwin	18	0.47	20	0.44	34	0.78		
Remainder of NT	32	0.84	23	0.50	46	1.05		
Northern Territory	50	1.31	43	0.94	80	1.82		
Canberra	46	1.21	43	0.94	74	1.69		
Remainder of ACT	6	0.16	2	0.04	3	0.07		
ACT	52	1.37	45	0.98	77	1.76		
TOTAL	3808	100	4586	100	4387	100		

Destination of Graduates moving to interstate employment as percentage of all movers, 1992,1996 and 1999

	199	2	199	6	1999			
- -	Number	Percent	Number	Percent	Number	Percent		
Melbourne	62	11.3	71	10.7	101	13.6		
Remainder of VIC	51	9.3	54	8.2	61	8.2		
Sydney	96	17.5	125	18.9	115	15.5		
Remainder of NSW	91	16.5	114	17.2	90	12.1		
Brisbane	29	5.3	28	4.2	36	4.9		
Remainder of QLD	60	10.9	96	14.5	80	10.8		
Perth	12	2.2	20	3.0	30	4.0		
Remainder of WA	23	4.2	34	5.1	26	3.5		
Hobart	6	1.1	12	1.8	24	3.2		
Remainder of TAS	18	3.3	20	3.0	21	2.8		
Darwin	18	3.3	20	3.0	34	4.6		
Remainder of NT	32	5.8	23	3.5	46	6.2		
Canberra	46	8.4	43	6.5	74	10.0		
Remainder of ACT	6	1.1	2	0.3	3	0.4		
TOTAL	550	100.0	662	100.0	741	100.0		

University of South Australia graduates by interstate location, 1990 to 2000

F.O.S.	NSW Y	Vic Q1	d W	A Tas	NT	Total	
5.2 Edn Post/Other	608	178	473	20	15	57	1351
5.1 Educn. Initial	118	58	44	19	10	58	307
4.1 Business St	66	40	23	7	4	2	142
3.2 Languages	40	43	20	1	0	8	112
7.2 Health, Other	13	24	3	6	7	1	54
9.2 Life Sc.	11	23	6	5	3	6	54
3.1 Humanities	14	15	5	2	4	5	45
3.4 Soc.Sc.	17	6	4	2	6	2	37
6.3 Civil Engin	6	8	9	4	1	8	36
6.8 Other Eng.	12	5	3	10	1	2	33
7.3 Nursing, initial	7	6	9	3	0	8	33
6.6 Mech Eng.	7	14	3	5	1	2	32
6.5 Electronic/computing eng.	15	9	3	1	0	2	30
3.3 Vis/Perf Arts	8	3	12	1	0	4	28
2.2 Building	11	6	0	2	4	4	26
9.1 Computer Sc.	10	6	3	0	1	1	21
6.7 Mining Eng.	4	0	5	8	2	1	20
2.3 Urban	6	3	2	4	1	1	17
6.4 Electrical Eng.	6	4	2	1	0	3	16
2 .1 Architecture	7	0	1	0	0	2	10
7.7 Rehabilitn.	4	1	1	0	0	0	6
9.6Geology	0	0	2	3	0	1	6
9.3 Maths	4	0	0	0	0	0	4
6.9 Surveying	2	0	0	1	0	0	3
1.1 Agric.	0	1	1	0	0	0	2
4.2 Accounting	2	0	0	0	0	0	2
3.6 Soc. Wk	0	1	0	0	0	0	1
7.4 Nursing, post	0	0	0	0	1	0	1
9.4 Chem	0	0	0	1	0	0	1
3.5 Psych	0	0	0	0	0	0	0
4.3 Economics	0	0	0	0	0	0	0
5.3 Aeron Eng.	0	0	0	0	0	0	0
6.2 Chem Engin.	0	0	0	0	0	0	0
7.1 Dentistry	0	0	0	0	0	0	0
7.5 Pharmacy	0	0	0	0	0	0	0
7.6 Medicine	0	0	0	0	0	0	0
8.1 Law	0	0	0	0	0	0	0
8.2 Law, other	0	0	0	0	0	0	0
9.5 Physics	0	0	0	0	0	0	0
10.1 Vet. Sc.	0	0	0	0	0	0	0
Sub total	998	454	634	106	61	178	2430
11.1 Unspec.	893	617	360	161	78	339	2448
	0	0	0	0	0	0	
Totals	1891	1071	994	268	138	517	4879

University of South Australia graduates by field of study living in Queensland.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 T	otal
5.2 Edn Post/Other	5	1	41	39	60	86	64	63	56	33	25	473
5.1 Educn. Initial	2	1	4	6	2	9	4	6	2	4	4	44
4.1 Business St			2	4	6	3	6				2	23
3.2 Languages	5	1	8	5					1			20
3.3 Vis/Perf Arts										5	7	12
6.3 Civil Engin		1		1	2	1	1		2		1	9
7.3 Nursing, initial											9	9
9.2 Life Sc.		1						1	1	2	1	6
3.1 Humanities			1			1	1			1	1	5
6.7 Mining Eng.	1				2		1	1				5
3.4 Soc.Sc.			2	1	1							4
6.5 Electronic/computing eng.					1	1	1					3
6.6 Mech Eng.		1		1						1		3
6.8 Other Eng.							2				1	3
7.2 Health, Other											3	3
9.1 Computer Sc.											3	3
2.3 Urban								1			1	2
6.4 Electrical Eng.				1				1				2
9.6Geology										1	1	2
1.1 Agric.			1									1
2 .1 Architecture										1		1
7.7 Rehabilitn.										1		1
2.2 Building												0
3.5 Psych												0
3.6 Soc. Wk												0
4.2 Accounting												0
4.3 Economics												0
5.3 Aeron Eng.												0
6.2 Chem Engin.												0
6.9 Surveying												0
7.1 Dentistry												0
7.4 Nursing, post												0
7.5 Pharmacy												0
7.6 Medicine												0
8.1 Law												0
8.2 Law, other												0
9.3 Maths												0
9.4 Chem												0
9.5 Physics												0
10.1 Vet. Sc.												0
												0
11.1 Unspec.	91	31	25	37	21	29	31	37	33	21	4	360
												0
Totals	104	37	84	95	95	130	111	110	95	70	63	994

University of South Australia graduates by field of study living in New South Wales.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Γotal
5.2 Edn Post/Other	5	4	58	62	65	121	89	88	64	31	21	603
5.1 Educn. Initial		2	9	8	8	15	6	8	15	43	4	118
4.1 Business St		1	1		4	3	6	1		14	36	66
3.2 Languages	6	3	22	4	3				1		1	34
3.4 Soc.Sc.	1		6	1	3	3				3		16
7.2 Health, Other											13	13
6.5 Electronic/computing eng.	3	1		2	1	3	3			1	1	12
6.8 Other Eng.				1	1	1	1	1	3	1	3	12
2.2 Building				3	2	2	1		2	1		11
3.1 Humanities	3		1		2	2	2		1		3	11
9.1 Computer Sc.											10	10
9.2 Life Sc.	1			4		2		1	1	2		10
3.3 Vis/Perf Arts											8	8
2 .1 Architecture			2	2	1		1				1	7
6.6 Mech Eng.				3				3		1		7
7.3 Nursing, initial											7	7
2.3 Urban						4			1	1		6
6.3 Civil Engin				1	2		1		1		1	6
6.4 Electrical Eng.	1		1		2			2				5
6.7 Mining Eng.							2	1		1		4
7.7 Rehabilitn.											4	4
9.3 Maths										1	3	4
4.2 Accounting										1	1	2
6.9 Surveying										2		2
1.1 Agric.												0
3.5 Psych												0
3.6 Soc. Wk												0
4.3 Economics												0
5.3 Aeron Eng.												0
6.2 Chem Engin.												0
7.1 Dentistry												0
7.4 Nursing, post												0
7.5 Pharmacy												0
7.6 Medicine												0
8.1 Law												0
8.2 Law, other												0
9.4 Chem												0
9.5 Physics												0
9.6Geology												0
10.1 Vet. Sc.												0
												0
11.1 Unspec.	118	85	55	77	74	111	77	103	99	91	3	775
												0
Totals	138	96	155	168	168	267	189	208	188	194	120	1753

University of South Australia graduates by field of study living in Victoria.

	1990	1991	1992	1993						1999	2000 T	otal
5.2 Edn Post/Other			9	24	14	34	24	24	32	10	7	178
5.1 Educn. Initial	1		8	5	1	5	4	11	4	9	10	58
3.2 Languages	11	2	16	14								43
4.1 Business St	1	1	1	6	2	1				11	17	40
7.2 Health, Other				2							22	24
9.2 Life Sc.			1	1		3	1	5	3	2	7	23
3.1 Humanities							3	1	1	1	9	15
6.6 Mech Eng.	2	2		2		1	1	1	2	1	2	14
6.5 Electronic/computing eng.	1		2	1	1		3				1	9
6.3 Civil Engin				2	1		1	1	2		1	8
2.2 Building	1			1		1				1	2	6
3.4 Soc.Sc.			1		1	3			1			6
7.3 Nursing, initial										1	5	6
9.1 Computer Sc.											6	6
6.8 Other Eng.				1				2			2	5
6.4 Electrical Eng.		1		1					1		1	4
2.3 Urban	1			1							1	3
3.3 Vis/Perf Arts											3	3
3.6 Soc. Wk											1	1
7.7 Rehabilitn.										1		1
2 .1 Architecture												0
3.5 Psych												0
4.2 Accounting												0
4.3 Economics												0
5.3 Aeron Eng.												0
6.2 Chem Engin.												0
6.7 Mining Eng.												0
6.9 Surveying												0
7.1 Dentistry												0
7.4 Nursing, post												0
7.5 Pharmacy												0
7.6 Medicine												0
8.1 Law												0
8.2 Law, other												0
9.3 Maths												0
9.4 Chem												0
9.5 Physics												0
9.6Geology												0
10.1 Vet. Sc.												0
1.1 Agric.			1									
<u> </u>												0
11.1 Unspec.	64	54	51	44	85	71	23	79	77	68	1	617
•												0
Totals	82	60	90	105	105	119	60	124	123	105	98	1071

Flinders University Alumni, by State by Field of Study, 1994 to 1999

F.O.S.	NSW	Vic	Qld	WA	Tas	NT	Total
1.1 Agric.	0	0	0	0	0	0	0
2 .1 Architecture	0	0	0	0	0	0	0
2.2 Building	0	0	0	0	0	0	0
2.3 Urban	0	0	0	0	0	0	0
3.1 Humanities	22	42	2		1	6	75
3.2 Languages	0	0	0		0	0	0
3.3 Vis/Perf Arts	0	1	0		0	0	1
3.4 Soc.Sc.	2	4	1	0	0	2	9
3.5 Psych	0	1	1	0	0	0	2
3.6 Soc. Wk	1	0	0		0	0	1
4.1 Business St	30	43	8			16	103
4.2 Accounting	0	0	0		0	1	1
4.3 Economics	8	12	1	0	0	4	25
5.1 Educn. Initial	53	28	21	4	4	11	121
5.2 Edn Post/Other	57	2	9	-	2	3	74
5.3 Aeron Eng.	0	0	0	_	0	0	0
6.2 Chem Engin.	0	0	0		0	0	0
6.3 Civil Engin	0	0	0		0	0	0
6.4 Electrical Eng.	0	0	0		0	0	0
6.5 Electronic/computing eng.	0	0	0		0	0	0
6.6 Mech Eng.	0	0	0		0	0	0
6.7 Mining Eng.	0	0	0		0	0	0
6.8 Other Eng.	1	1	0	-	0	0	2
6.9 Surveying	0	0	0		0	0	0
7.1 Dentistry	0	0	0		0	0	0
7.2 Health, Other	64	58	68		24	38	260
7.3 Nursing, initial	55	52	57		4	23	198
7.4 Nursing, post	11	34	21	2	2	3	73
7.5 Pharmacy	0	0	0		0	0	0
7.6 Medicine	0	0	0		0	0	0
7.7 Rehabilitn.	0	0	0		0	0	0
8.1 Law	1			_		0	1
8.2 Law, other	1	0	0			0	
9.1 Computer Sc.	2	0	0		0	1	1
9.2 Life Sc.	26	49	2			18	105
9.3 Maths	0	0	0			0	
9.4 Chem	0	0	0			0	
9.5 Physics	0	0	0			0	
9.6Geology	0	0	0			0	0
10.1 Vet. Sc.	0	0	0			0	
10.1 Vet. Sc.	0	0	0			0	0
11 1 Unence	26	14	19	_	7	<u>0</u> 4	77
11.1 Unspec.		0	0		0	4	0
Totals	360		_	_			ŏ
Totals	300	344	210	1 39	53	130	1136

Flinders University Alumni resident in New South Wales, by Field of Study, 1994 to 1999

F.O.S.	1994	1995	1996	1997	1998	1999 Tota	al
7.2 Health, Other	7	6	16	11	14	10	64
5.2 Edn Post/Other	13	23	4	3		14	57
7.3 Nursing, initial	10		16	13	9	7	55
5.1 Educn. Initial			17	24	11	1	53
4.1 Business St	2		5	8	6	9	30
9.2 Life Sc.	6	1	4	4	4	7	26
3.1 Humanities	3		3	6	8	2	22
7.4 Nursing, post	3		2	4		2	11
4.3 Economics	2		1	2	3		8
3.4 Soc.Sc.	1					1	2
9.1 Computer Sc.						2	2
3.6 Soc. Wk					1		1
6.8 Other Eng.	1						1
8.1 Law			1				1
8.2 Law, other	1						1
1.1 Agric.							0
2.1 Architecture							0
2.2 Building							0
2.3 Urban							0
3.2 Languages							0
3.3 Vis/Perf Arts							0
3.5 Psych							0
4.2 Accounting							0
5.3 Aeron Eng.							0
6.2 Chem Engin.							0
6.3 Civil Engin							0
6.4 Electrical Eng.							0
6.5 Electronic/computing eng.							0
6.6 Mech Eng.							0
6.7 Mining Eng.							0
6.9 Surveying							0
7.1 Dentistry							0
7.5 Pharmacy							0
7.6 Medicine							0
7.7 Rehabilitn.							0
9.3 Maths							0
9.4 Chem							0
9.5 Physics							0
9.6Geology							0
10.1 Vet. Sc.							0
							0
11.1 Unspec.		23		1		2	26
- · · r · · · ·				-		_	0
Totals	49	53	69	76	56	57	360

Flinders University Alumni, resident Victoria, by Field of Study, 1994 to 1999

	1994	1995	1996	1997	1998	1999Tota	ıl
7.2 Health, Other	5	15	11	12	14	1	58
7.3 Nursing, initial	8	13	10	11	6	4	52
9.2 Life Sc.	4	2	14	12	9	8	49
4.1 Business St	3	4	10	4	17	5	43
3.1 Humanities	8	8	6	10	6	4	42
7.4 Nursing, post			8	5	10	11	34
5.1 Educn. Initial	1	7	1	1	12	6	28
4.3 Economics	1	2	3	2	4		12
3.4 Soc.Sc.	2			2			4
8.1 Law		1			2		3
5.2 Edn Post/Other	2						2
3.3 Vis/Perf Arts						1	1
3.5 Psych						1	1
6.8 Other Eng.			1				1
1.1 Agric.							0
2 .1 Architecture							0
2.2 Building							0
2.3 Urban							0
3.2 Languages							0
3.6 Soc. Wk							0
4.2 Accounting							0
5.3 Aeron Eng.							0
6.2 Chem Engin.							0
6.3 Civil Engin							0
6.4 Electrical Eng.							0
6.5 Electronic/computing eng.							0
6.6 Mech Eng.							0
6.7 Mining Eng.							0
6.9 Surveying							0
7.1 Dentistry							0
7.5 Pharmacy							0
7.6 Medicine							0
7.7 Rehabilitn.							0
8.2 Law, other							0
9.1 Computer Sc.							0
9.3 Maths							0
9.4 Chem							0
9.5 Physics							0
9.6Geology							0
10.1 Vet. Sc.							0
							0
11.1 Unspec.	3				3	8	14
Totals	37	52	64	59	83	49	344

Flinders University Alumni, resident in Queensland, by Field of Study, 1994 to 1999

F.O.S.	1994	1995	1996	1997	1998	1999Tota	.1
7.2 Health, Other	14	6	9	15	12	12	68
7.3 Nursing, initial	2	10	22	6	9	8	57
5.1 Educn. Initial			9	3	3	6	21
7.4 Nursing, post		5	4	4		8	21
5.2 Edn Post/Other		5				4	9
4.1 Business St				2	1	5	8
3.1 Humanities			1		1		2
9.2 Life Sc.			2				2
3.4 Soc.Sc.					1		1
3.5 Psych					1		1
4.3 Economics			1				1
1.1 Agric.							0
2 .1 Architecture							0
2.2 Building							0
2.3 Urban							0
3.2 Languages							0
3.3 Vis/Perf Arts							0
3.6 Soc. Wk							0
4.2 Accounting							0
5.3 Aeron Eng.							0
6.2 Chem Engin.							0
6.3 Civil Engin							0
6.4 Electrical Eng.							0
6.5 Electronic/computing eng.							0
6.6 Mech Eng.							0
6.7 Mining Eng.							0
6.8 Other Eng.							0
6.9 Surveying							0
7.1 Dentistry							0
7.5 Pharmacy							0
7.6 Medicine							0
7.7 Rehabilitn.							0
8.1 Law							0
8.2 Law, other							0
9.1 Computer Sc.							0
9.3 Maths							0
9.4 Chem							0
9.5 Physics							0
9.6Geology							0
10.1 Vet. Sc.							0
							0
11.1 Unspec.	13	4				2	19
							0
Totals	29	30	48	30	28	45	210

REFERENCES

- Ausrecon, 1999. Skills in the South Australian Automotive Industry, South Australian Department of Industry and Trade.
- Australian Bureau of Statistics (ABS). *Australian Demographic Statistics Quarterly*, various issues, catalogue no. 3101.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS). Average Weekly Earnings, States and Australia, catalogue no. 6302.0, various issues, ABS, Canberra.
- Australian Bureau of Statistics (ABS). *Birth Australia*, various issues, catalogue no. 3301.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS). *Deaths Australia*, various issues, catalogue no. 3302.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS). *Employee Earning and Hours, Australia*, catalogue no. 6306.0, various issues, ABS, Canberra.
- Australian Bureau of Statistics (ABS). *Overseas Arrivals and Departures Australia*, various issues, catalogue no. 3402.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS). *Labour Mobility, Australia*, various issues, catalogue no. 6209.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS). *Household Expenditure Survey, Australia*, various issues, catalogue no. 6537.0 and 6530.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1966-73. *Overseas Arrivals and Departures, Australia*, catalogue no. 3402.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1984. *Interstate Migration Australia: Census of Population and Housing 30 June 1981*, catalogue no. 3411.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1986. *Australian Demographic Trends*, catalogue no. 3102.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1988. *Interstate Migration, Australia, 12 Months Ended 12 May 1987*, catalogue no. 3408.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1996. *How Australia Takes a Census*, catalogue no. 2903.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1998a. *Australian Social Trends 1998*, catalogue no. 4102.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1998b. *Sydney ... A Social Atlas*, catalogue no. 2030.2, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1998c. *Melbourne ... A Social Atlas*, catalogue no. 2030.1, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1998d. *Brisbane ... A Social Atlas*, catalogue no. 2030.3, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1999a. *Disability, Ageing and Carers: Summary of Findings, 1998*, catalogue no. 4430.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 1999b. *Transition from Education to Work*, catalogue no. 6227.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 2000a. *Australian Demographic Statistics*, *December Quarter 1999*, catalogue no. 3101.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS), 2000b. *Population Projections Australia 1999 to 2101*, catalogue no. 3222.0, ABS, Canberra.
- Bell, M.J., 1992. Internal Migration in Australia, 1981-1986, AGPS, Canberra.
- Bell, M.J., 1995. *Internal Migration in Australia, 1986-1991: Overview Report*, AGPS, Canberra.

- Bell, M.J., 1997a. South Australia at the 1996 Census: Population Change and Distribution, Geodemographic Research Group, Department for Transport, Urban Planning and the Arts, Adelaide.
- Bell, M.J., 1997b. *Population Movement in South Australia: 1986-1991*, Geodemographic Research Group, Department for Transport, Urban Planning and the Arts, Adelaide.
- Bell, M., 2000. *Interstate Migration: The South Australian Experience, 1991 to 1996*, Department for Transport, Urban Planning and the Arts and Adelaide University.
- Bell, M.J. and Hugo, G.J.H., 2000. *Internal Migration in Australia, 1991-1996: Overview and the Overseas-Born*, Department of Immigration and Multicultural Affairs, Canberra.
- Bell, M.J. and Maher, C.A., 1995. *Internal Migration in Australia, 1986-91: The Labour Force*, AGPS, Canberra.
- Bell, M.J. and Stratton, M., 1999. 'Migration data', *Journal of the Australian Population Association*, vol. 15, no. 2, pp. 155-170.
- Borrie, W.D., 1944. 'The social basis of a population policy', *The Australian Quarterly*, vol. XVI, no. 4, pp. 50-63.
- Choi, C.Y. and Burnley, I.H., 1974. 'Population components in the growth of cities', pp. 51-61 in Burnley, I.H. (ed.), *Urbanisation in Australia: The Post War Experience*, Cambridge University Press, Cambridge.
- Commissioner for Public Employment, 1999. *South Australian Public Sector Workforce Information*, South Australian Government.
- Commonwealth Bureau of Census and Statistics (CBCS). *Demography*, various issues, Government Printer, Canberra.
- Coughlan, T.A., 1903. The Decline in the Birth-Rate of New South Wales and Other Phenomena of Child-Birth, An Essay in Statistics, NSW Government Printer, Sydney.
- DeJong, G.F. and Klein, P.M., 1999. *Pennsylvania's Brain Drain Migration in the mid-1990s*, The Pennsylvania State Data Center, Pennsylvania.
- Department of Employment, Workplace Relations and Small Business, 1999. Skill Shortage in the Trades An Employment Perspective, September.
- Department of Employment, Workplace Relations and Small Business, 1999. *Skill Shortages in the Professions and Information Technology*. www.dewrsb.gov.au/employment/publications/labourEconomicsOffice/sa
- Department of Employment, Workplace Relations and Small Business, 1999. *Skill Shortages in the Trade*. www.dewrsb.gov.au/employment/publications/labourEconomicsOffice/sa
- Department of Employment, Workplace Relations and Small Business, 1999. *Skilled Vacancy Database*, Commonwealth of Australia.
- Department of Immigration and Multicultural Affairs (DIMA), 1999. '1999-2000 Migration (Non-Humanitarian) Program' *Media Release*, MPS 62/99 DIMA, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA), 1999. '1999-2000 Migration (Non-Humanitarian) Program outcome' *Media Release*, MPS 77/2000 DIMA, Canberra.
- Department of Immigration and Multicultural Affairs (DIMA). *Immigration Update*, various issues, AGPS, Canberra.
- Fisher, N.W.F., 1969. Some Aspects of Interstate Migration in Australia. Paper presented at 41st Congress, Australian and New Zealand Association for the Advancement of Science, Section 21 (Geography), Adelaide, 20 August.

- Gelber, F. and Jones, M., 1999. *State of Stagnation –Investment Required*, in 'Beyond the Contract State Ideas for Social and Economic Renewal in South Australia', John Spoehr, J. (ed.), Wakefield Press, Adelaide.
- Graduate Careers Council of Australia Ltd., 1999. *Graduate Destination Survey 1998*, Graduate Careers Council of Australia Ltd., Parkville, Victoria.
- Guthrie, B. and Johnson, T.J., 1997. *Study of Non-Response to the 1996 Graduate Destination Survey*, DEETYA, Canberra.
- Harris, K.R., 1997. Residential Mobility and Capital Accumulation. Unpublished PhD Thesis, University of Adelaide, pp. 192-199.
- Hicks, N., 1978. *The Sin and Scandal: Australia's Population Debate 1891-1911*, ANU Press, Canberra.
- Hoem, J.M., 1990. 'Social policy and recent fertility change in Sweden', *Population and Development Review*, vol. 16, no. 4, pp. 735-748.
- Hugo, G.J., 1971. Internal Migration in South Australia, 1961-1966. Unpublished MA Thesis, Flinders University of South Australia, Adelaide.
- Hugo, G.J., 1974. 'Internal migration and urbanisation in South Australia', pp. 81-97 in Burnley, I.H. (ed.), *Urbanisation in Australia: The Post War Experience*, Cambridge University Press, Cambridge.
- Hugo, G.J., 1983a. 'Internal migration in Australia: some first glimpses from the 1981 census', pp. 221-283 in *Migration in Australia*, Proceedings of a Symposium held in Brisbane, 1-2 December 1983, Royal Geographic Society of Australasia and Australian Population Association, Brisbane.
- Hugo, G.J., 1983b. 'South Australia's changing population', *South Australian Geographical Papers No. 1*, Royal Geographical Society of Australasia (SA Branch), Adelaide.
- Hugo, G.J., 1986. Australia's Changing Population: Trends and Implications, Oxford University Press, Melbourne.
- Hugo, G.J., 1990. Atlas of the Australian People: South Australia, AGPS, Canberra.
- Hugo, G.J., 1998. 'Using geographical information systems to improve equity in access to tertiary education in Australia', *Journal of Institutional Research in Australia*, vol. 7, no. 2, pp. 45-71.
- Hugo, G.J., 1999. 'South Australia's population at the turn of the century', pp. 55-91 in Spoehr, J. (ed.), *Beyond the Contract State*, Wakefield Press, Adelaide.
- Hugo, G.J., 2000. Declining Fertility and Policy Intervention in Europe: Some Lessons for Australia? Paper prepared for Workshop on Population, Gender and Reproductive Choice: The Motherhood Questions, organised by the Academy of Social Sciences in Australia, The Department of Family and Community Services, Women's Health Australia and the Division of Education, Arts and Social Sciences at the University of South Australia, Adelaide, February.
- Jarvie, W.K., 1989. 'Migration and regional development', pp. 218-223 in Higgins, B. and Zagorski, I. (eds.), Australian Regional Development, Readings in Regional Experiences, Policies and Prospects, AGPS, Canberra.
- Kenworthy, T., 2000. 'Iowa seeks former residents: Rural state wants to get them back', *USA Today*, 2 August.
- Maher, C.A. and McKay, J., 1986. *Final Report: Internal Migration in Australia*, 1981 Internal Migration Study, Department of Immigration and Ethnic Affairs on behalf of the Joint Commonwealth, State and Territory Population and Immigration Research Program, Canberra.
- McDonald, P., 1997. 'Gender, equity, social institutions and the future of fertility', *Working Papers in Demography*, No. 69, Australian National University, Canberra.

- McDonald, P., 2000a. 'Low fertility in Australia: evidence, causes and policy responses', *People and Place*, vol. 8, no. 2, pp. 6-20.
- McDonald, P., 2000b. The 'Toolbox' of Public Policies to Impact on Fertility A Global View. Paper prepared for the Annual Seminar 2000 of the European Observatory on Family Matters, Low Fertility, Families and Public Policies, Sevilla (Spain), 15-16 September.
- McDonald, P. and Kippen, R., 1999. Population Futures for Australia: The Policy Alternatives. Text-for-Delivery prepared for Vital Issues Seminar, Canberra, 31 March.
- McIntosh, A., 1998. 'European population policy in the twentieth century: is it relevant for Australia?', *People and Place*, vol. 6, no. 3, pp. 1-15.
- Minnesota Department of Trade and Economic Development. *Come Home to Minnesota Workforce Recruitment Initiative*, Minnesota Department of Trade and Economic Development, Minnesota.
- Myrdal, A., 1941. Nation and Family, New York.
- National Centre for Social and Economic Modelling, 2000. *Income Distribution Report*, Issue 12, May.
- National Institute of Economic and Industry Research, 2000. *Benchmarking and Projecting the South Central Region*, South Central Regional Network.
- Newbold, K.B., 1999. 'Spatial distribution and redistribution of immigrants in the metropolitan US: 1980 and 1990', *Economic Geography*, July.
- O'Neil, M. and Whetton, S., 2000. *Electronics Industry Skills Audit*, prepared for the SA Department of Industry and Trade, SA Centre for Economic Studies.
- Rindfuss, R.R., Benjamin, K. and Morgan, S.P., 2000. The Changing Institutional Context of Low Fertility. Paper presented at the 2000 Annual Meeting of the Population Association of America, Los Angeles, California, 23-25 March.
- Rowland, D.T., 1979. *Internal Migration in Australia*, ABS Census Monograph Series, catalogue no. 3409.0, Australian Bureau of Statistics.
- Santow, G., Borrie, W.D. and Ruzicka, L.T., 1988. 'Landmarks in Australian population history', *Journal of the Australian Population Association*, Supplement to Volume 5.
- Spoehr, J. and Croce, N., 2000. *Learning and Earning*, a report of the Southern Adelaide Workplace Survey, South Central Regional Network.
- World Bank, 2000. World Development Report 2000, Oxford University Press, New York.
- Wulff, M. and Bell, M., 1997. *Internal Migration, Social Welfare and Settlement Patterns: Implications for Communities and Regions*, Bureau of Immigration, Multicultural and Population Research, Canberra.