



Eyre Peninsula Zone Football Task Force

Appendix 1

Demographic and Participation Analysis

Summary of Findings

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1 Demographic analysis

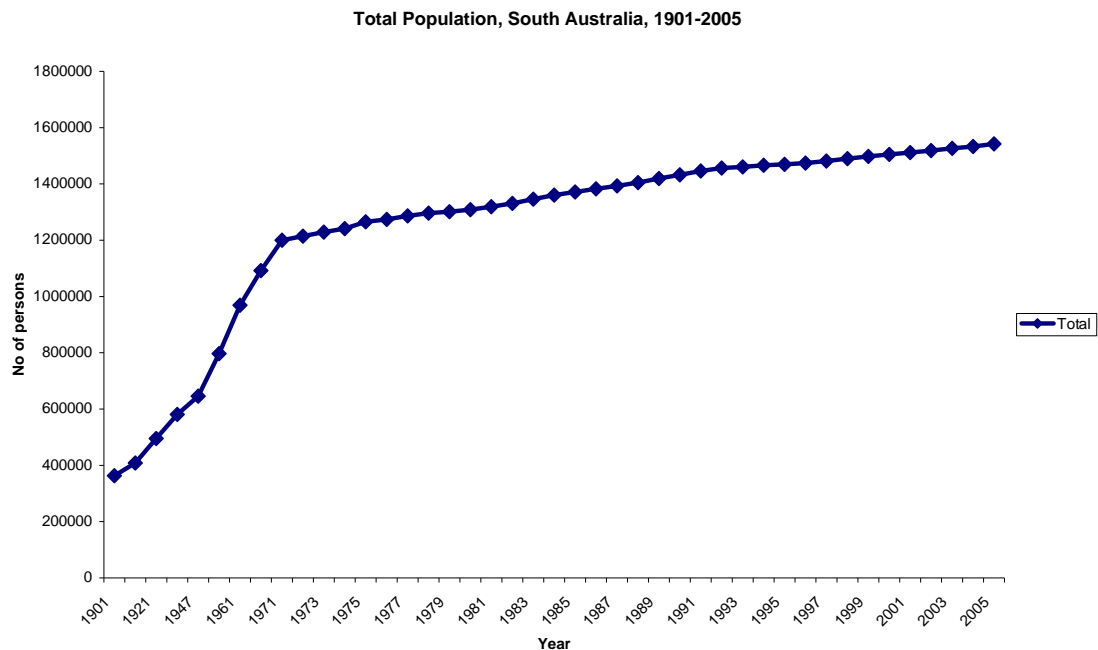
As was found in the research of the history of football on Eyre Peninsula, population has been a major factor affecting football on the Eyre Peninsula and it is a factor that can be measured. The following discussion looks at the historic population of South Australia, the Eyre region and the Local Government areas within the Eyre region. The following graphs depict what has happened. Using these statistics and identifying future influences, we can determine what is likely to be the trends of future populations.

A key factor impacting the viability of a football team is population. The success of a football team will depend on the 'pool' of people, namely the total population it can draw on for players, members, volunteers, umpires, runners etc.

1.1 State Population

The following graph depicts South Australia's population from 1901 until 2005.

Figure 1: Population, South Australia, 1901-2005

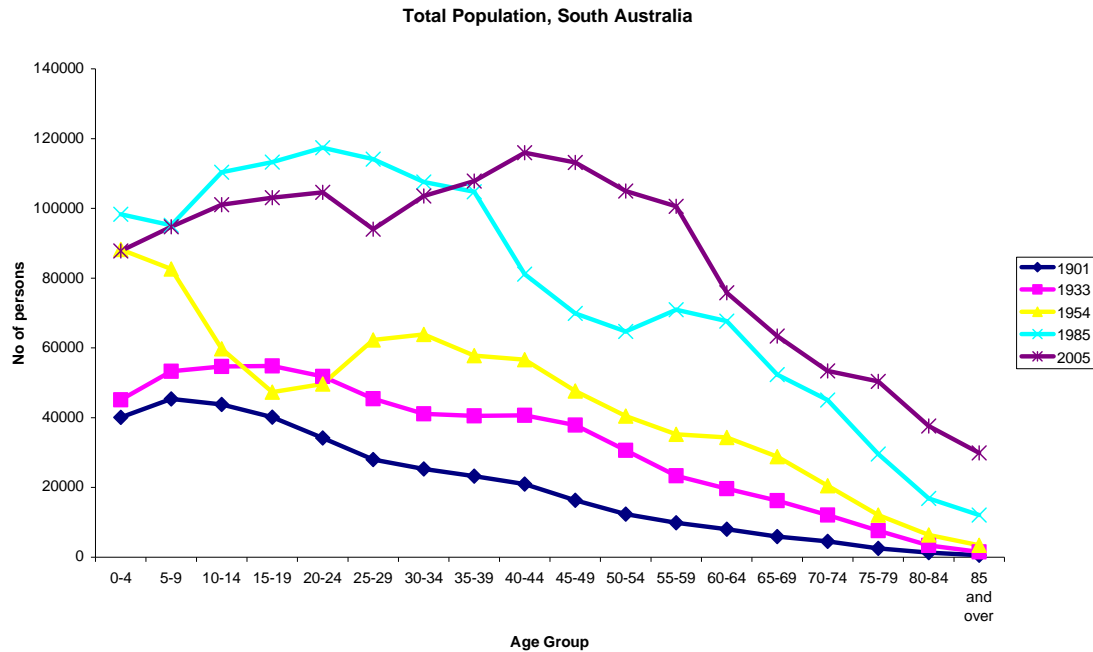


(Source: ABS 2006a)

As can be seen from the above graph, there was considerable growth in South Australia from federation in 1901 until 1971, in particular between 1947 and 1961, the post war "baby boom" period. Since 1972, growth has not been nearly as fierce. On average growth per annum from 1972 until 2005 is considerably lower than the growth experienced annually between 1901 and 1971.

The next graph displays the distribution of the South Australian population over a series of age groups, from 1901 to 2005 at approximate 25 year intervals.

Figure 2: Age distribution, South Australian Population, 1901, 1933, 1954, 1985 and 2005



(Source: ABS 2006a)

This graph shows that there was a marked increase in the 0-4 year age group from 1933 to 1954. Before 1933 the age distribution was not as varied as it was in subsequent years. From 1901 to 1933 there tended to be a greater proportion of people in the 5-19 year age groups. 1954 had a greater proportion of people in the 0-4 and 30-34 year age groups. By 1985 there was a greater proportion of people in the 20-24 and 55-59 year age groups. In 2005 there was a greater proportion of people in the 20-24 and 40-44 year age groups.

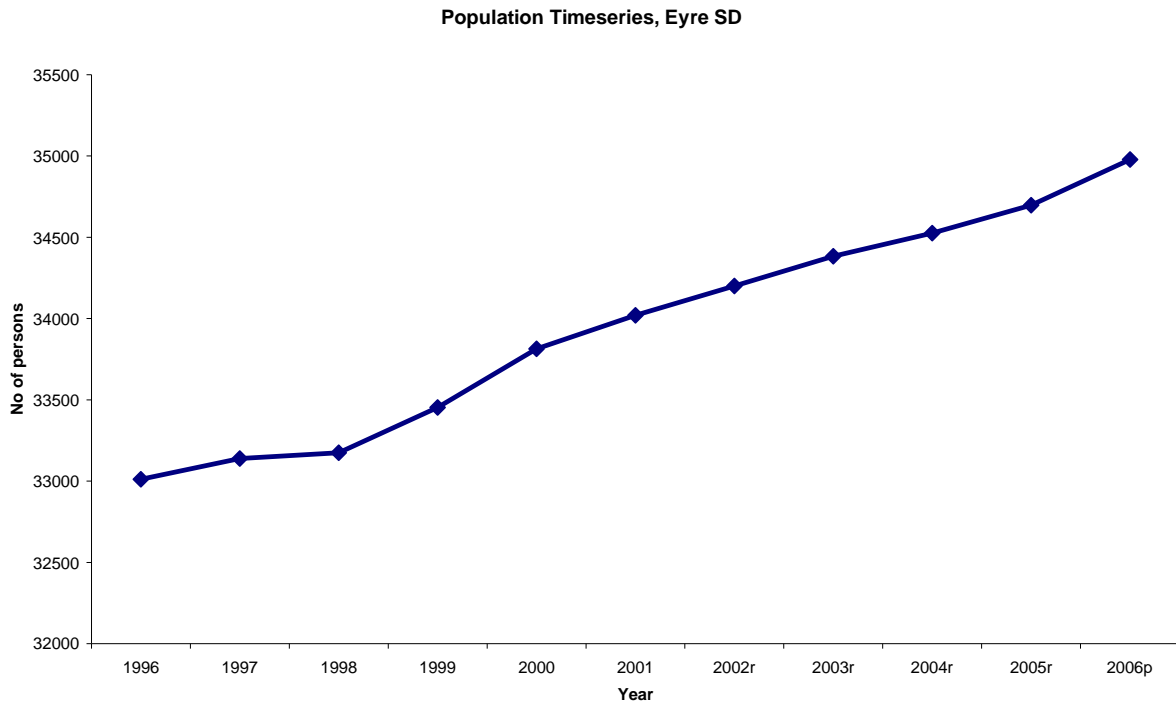
The 1901 and 1933, age distribution curves are quite similar. By 1954 we see a marked increase in the number of 0-4 year olds and a marked decrease in the 15-19 year olds. By 1985 we can see more pronounced curves in the age distribution graph, with more of the population in the 10-35 year age groups and also in the 54-64 year age groups. By 2005 we can see another shift in the population distribution. There is still a relatively large proportion of people in the 10-24 year age groups, but an even greater proportion in the 30-59 year age groups.

The shifts in the age distribution curves show us that not only has South Australia's population increased over the years, but the proportion of older people in our community has also increased.

1.2 Eyre and Whyalla Region Population

To identify more closely how population trends impact Eyre Peninsula, the following analysis looks at populations at a regional (SD) and Statistical Local Area (SLA) level.

Figure 3: Population Timeseries, Eyre SD, 1996-2006



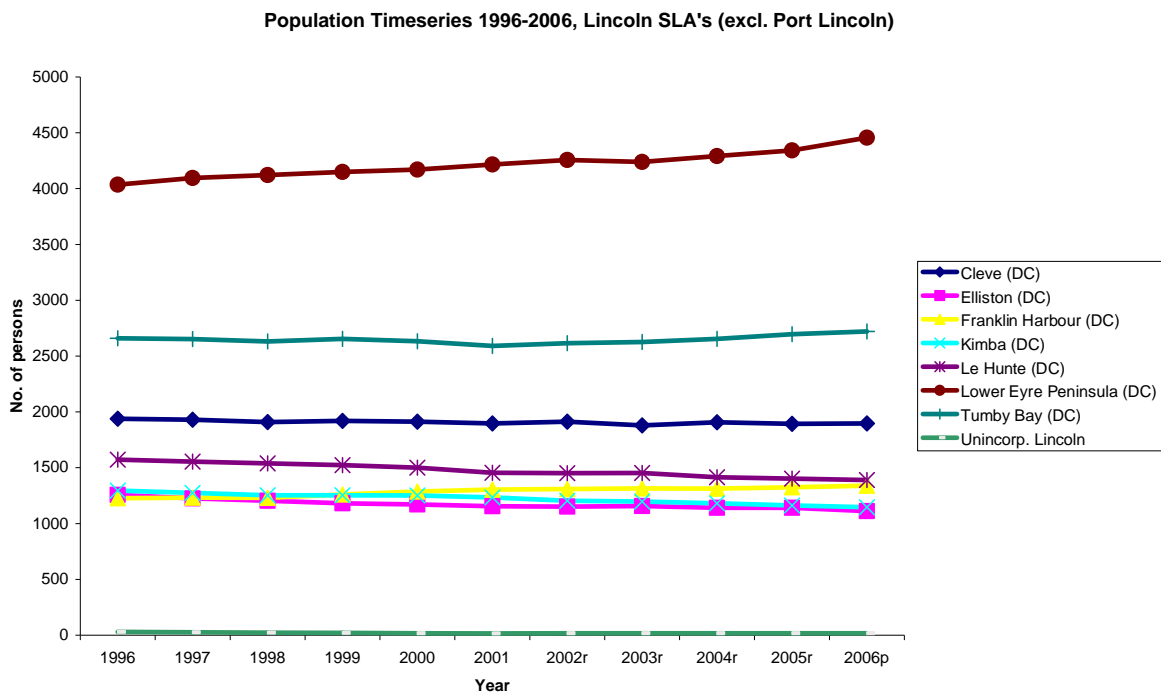
(Source: ABS 2007)

As can be seen from the following graph, the population within the Eyre Statistical Division (SD), has increased from 33,011 in 1996 to 34,979 in 2006.

If we analyse the regions that make up the Eyre SD we can gain an understanding of how the individual districts and towns influence this trend. The Eyre SD is broken into two Statistical Sub Divisions (SSD), Lincoln and West Coast. These SSD's are then made up of a number of Statistical Local Areas (SLA) which represents an even smaller part of the Eyre region.

The following graph presents the populations of Cleve, Elliston, Franklin Harbour, Kimba, Le Hunte, Lower Eyre Peninsula, Tumby Bay and Unincorporated Lincoln Statistical Local Areas (SLA) from 1996 to 2006. Port Lincoln has been excluded from this graph due to its comparative size, its population is analysed later in the report.

Figure 4: Population Timeseries 1996-2006, Lincoln (excl. Port Lincoln)

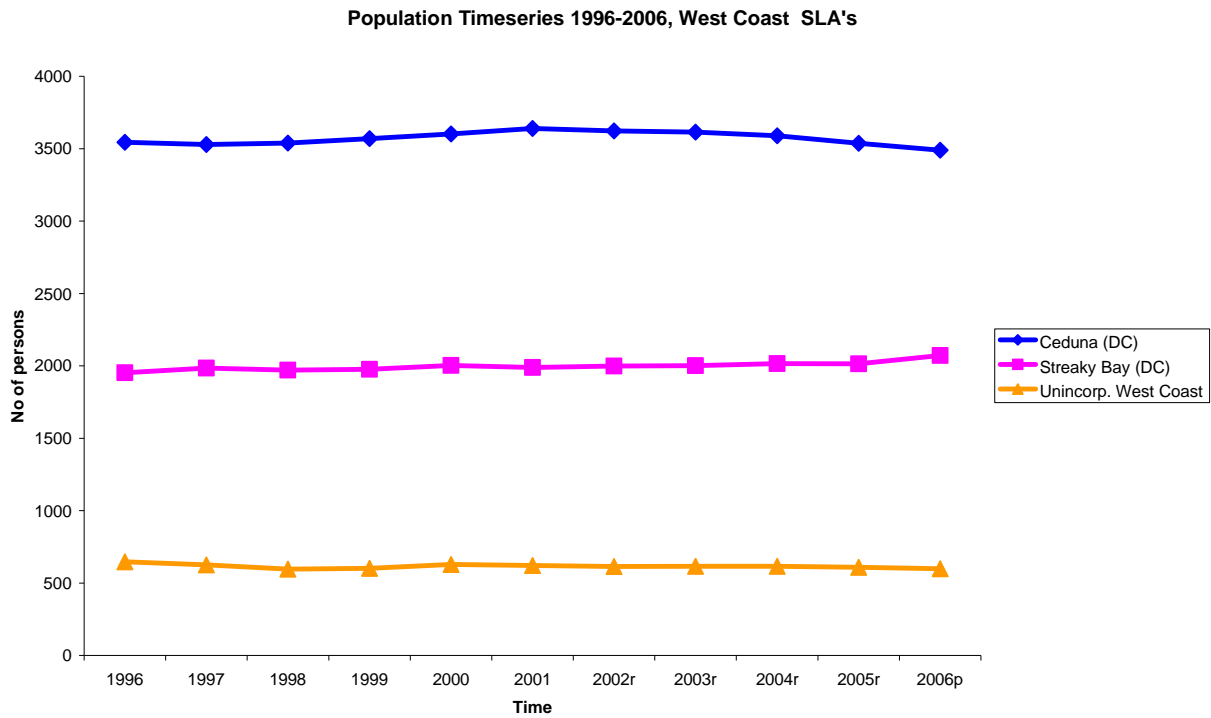


(Source: ABS 2007)

As can be seen in the above graph, population on the lower Eyre has not experienced a lot of growth over the past 10 years. Elliston (DC), Kimba (DC) and Le Hunte (DC) have experienced a population decrease in all but one of the past ten years.

The following graph plots the population of the Statistical Local Areas that make up the West Coast, namely Ceduna (DC), Streaky Bay (DC) and Unincorporated West Coast.

Figure 5: Population Timeseries 1996-2006, West Coast

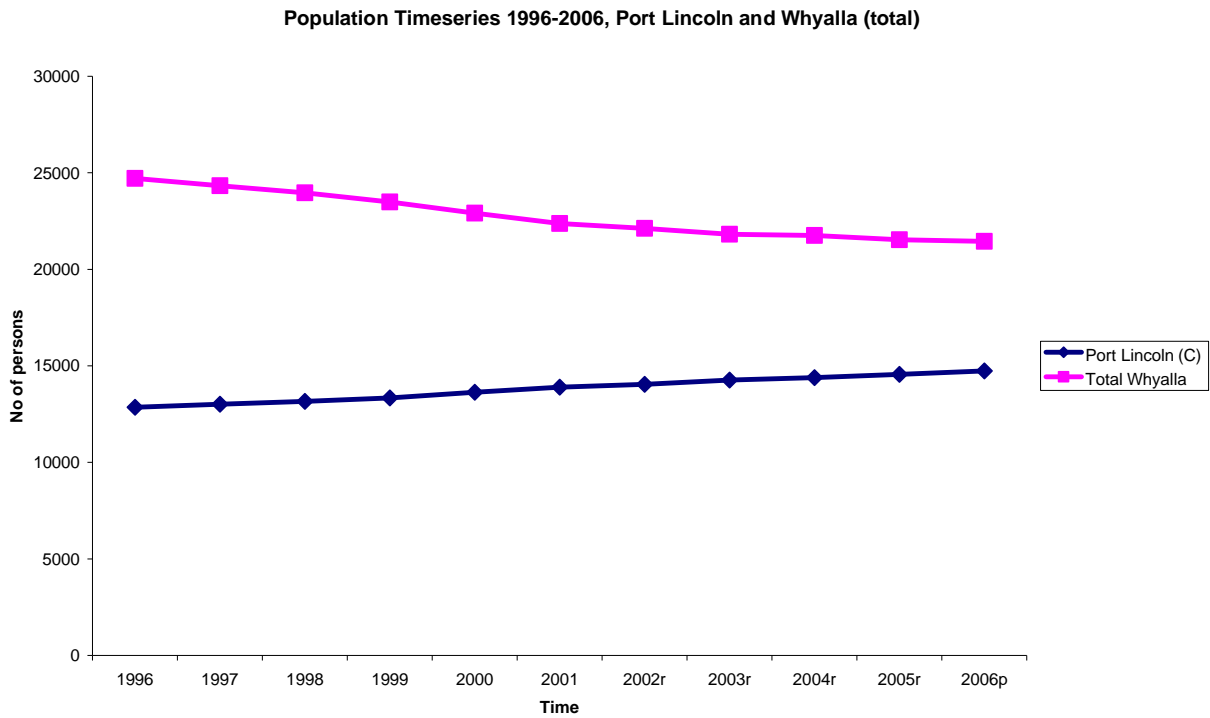


(Source: ABS 2007)

Like the Lower Eyre Peninsula, growth on the West Coast is not vigorous. Ceduna, Streaky Bay and Unincorporated West Coast have not experienced continual population decrease over the past 10 years nor have they experienced extensive growth. Population numbers on the West Coast have remained fairly static.

The following graph presents the population of regional centres Port Lincoln and Whyalla. In this graph Whyalla Total refers to the Whyalla and Unincorporated Whyalla SLA's.

Figure 6: Population Timeseries 1996-2006, Port Lincoln and Whyalla



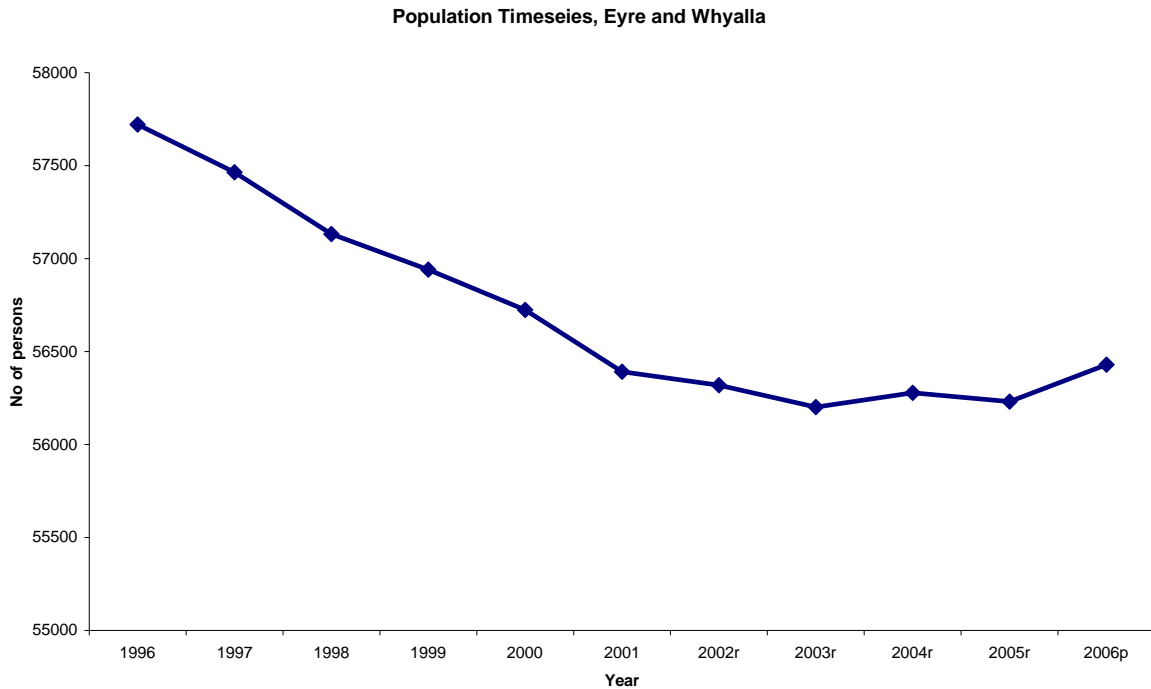
(Source: ABS 2007)

The above graph clearly indicated that Whyalla Total has been experiencing a population decline over the past 10 years. Port Lincoln on the other hand has experienced a population increase since 1996 through to 2006.

This graph, read in conjunction with the others also indicates that Port Lincoln contributes quite significantly to the overall population increase for the Eyre SD.

The following graph combines the population of Whyalla Total and the Eyre Region to display the cumulative trend.

Figure 7: Population Timeseries, Eyre and Whyalla, 1996-2006



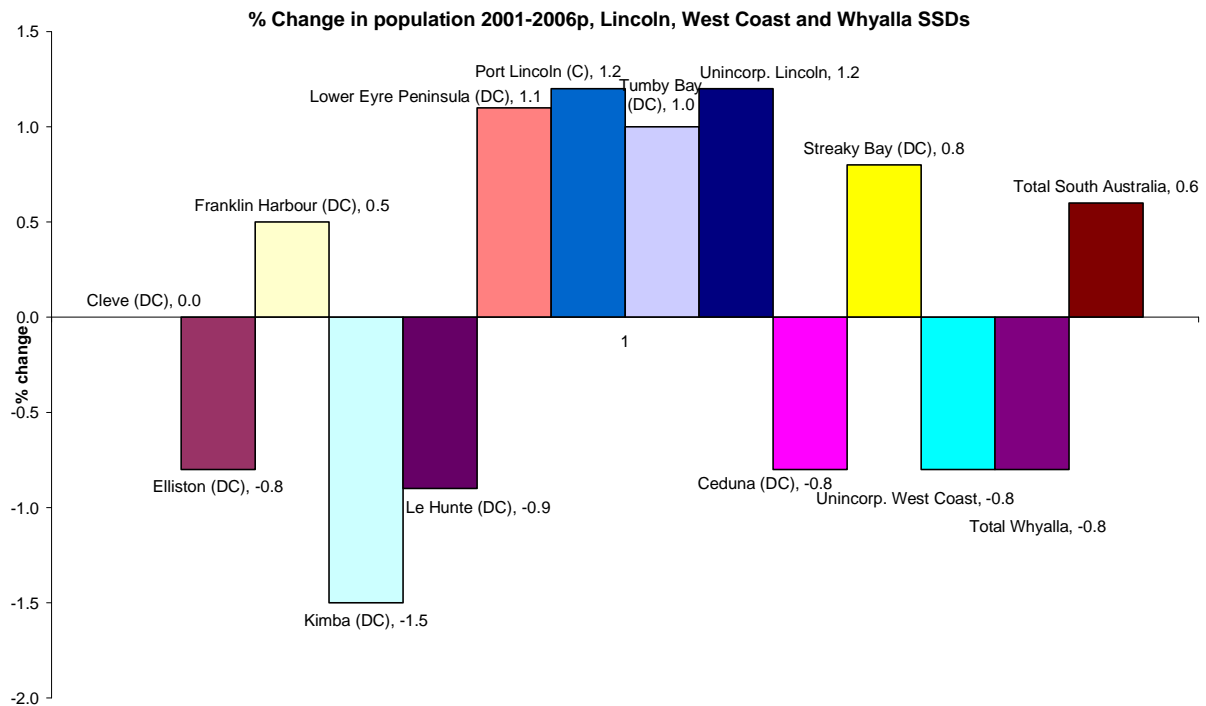
(Source: ABS 2007)

The above graph depicts the overall population trend for Eyre and Whyalla Statistical Divisions combined. Overall there is a considerable decreasing trend, indicating an overall decrease in population in this area. However, 2003 saw some overall population growth, which has continued until 2006.

1.3 Change in Population

The following graph displays the percentage change in population across all the SLA's on Eyre Peninsula as well as Total Whyalla from 2001 until 2006.

Figure 8: % Change in Lincoln, West Coast SLA's and Whyalla, 2001-2006



(Source: ABS 2007)

Results show that at least half of the Statistical Local Areas (SLA's) analysed have had a negative percentage change in population. Kimba in particular had a total population of 1,296 persons in 2001 and that number had reduced to 1,146 by 2006.

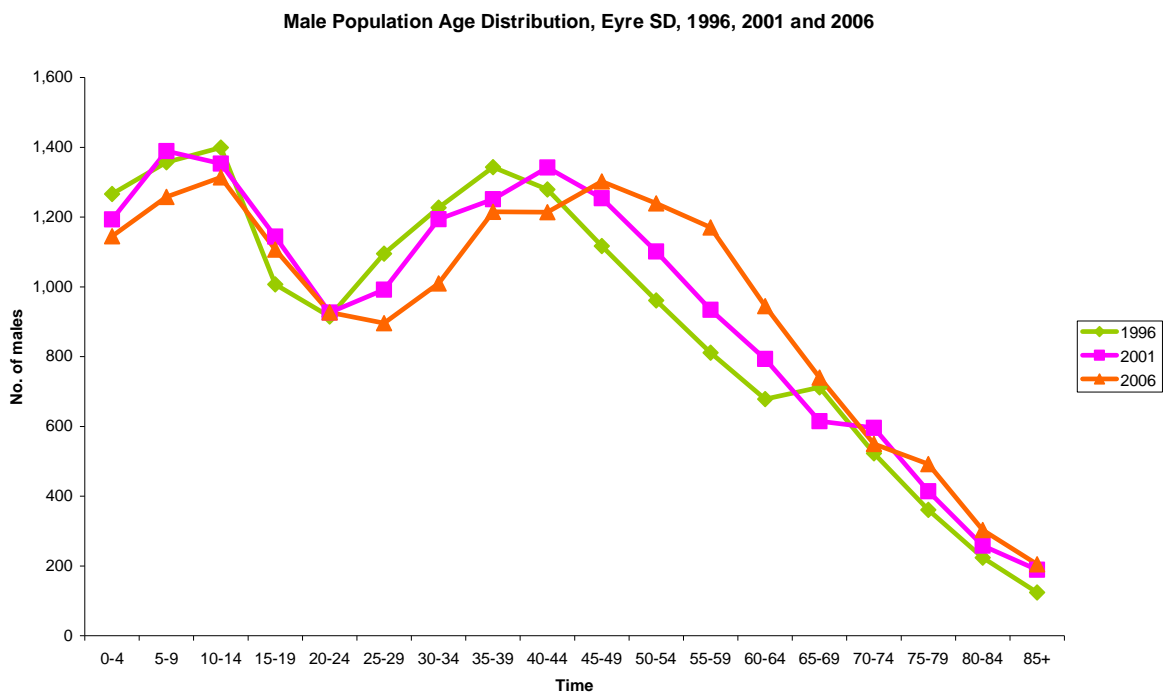
Port Lincoln and Unincorporated Lincoln have experienced the greatest growth in population numbers, both experiencing a population increase of 1.2% from 2001 until 2006. When compared to the South Australian average (0.6%); Lower Eyre Peninsula (1.1%), Port Lincoln (1.2%), Tumber Bay (1%), Unincorporated Lincoln (1.2%) and Streaky Bay (0.8%) have all experienced greater growth over the given time period.

1.4 Male Population

Given that Australian Rules Football is primarily played by males, it is necessary to look more in-depthly at those statistics relating to males. The following diagram depicts the age distribution of males in the Eyre SD in 1996, 2001 and 2006.

The graphs peak in the 5-14 and again 35-49 age ranges. This graph is representative of most regional and some metropolitan areas.

Figure 9: Male Population, by Age, Eyre SD, 1996-2006



(Source: ABS 2006b)

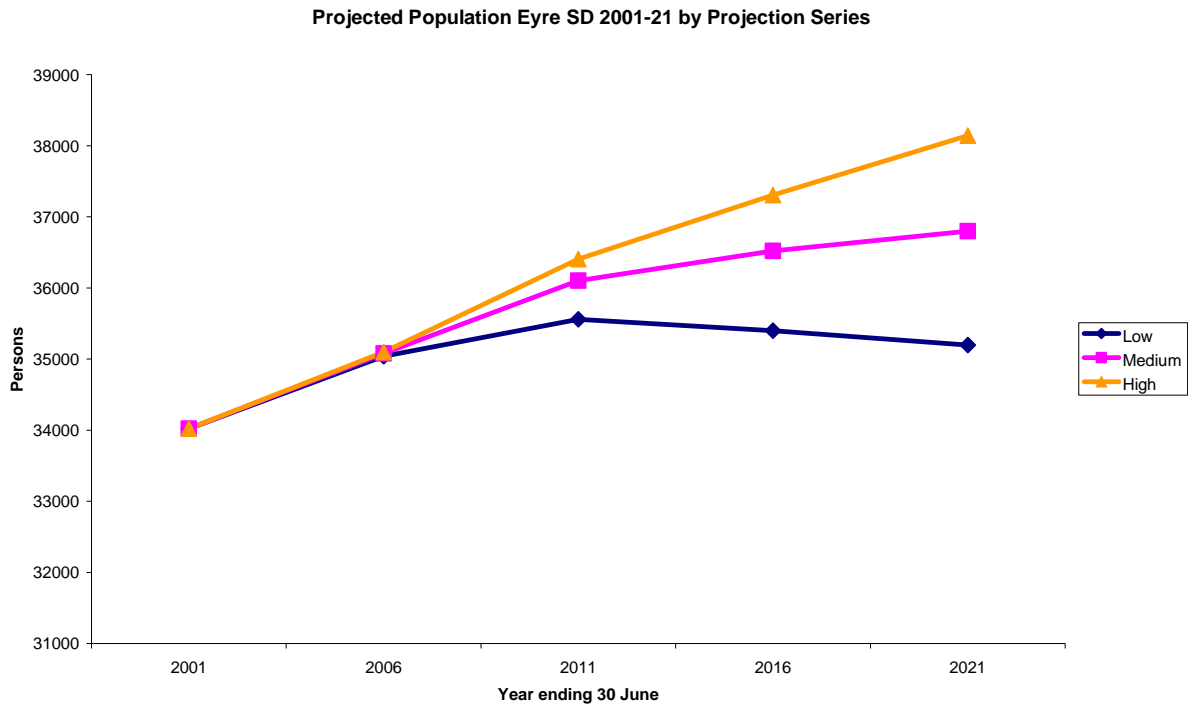
What is also interesting to note from this graph is that the peaks and troughs of the male population distribution have shifted to the right, to the 'older' end of the scale. This indicates an ageing population.

1.5 Population Projection

Analysis of historic population data gives us an understanding of the current situation and the previous trends of the Eyre Peninsula population. To assist in the future planning which is the aim of this report, it was necessary to seek population projections.

The following population projections have been calculated by State Government Agency, Planning SA and are based on census data. The projections are presented in three possible scenarios. The scenarios are based on high, medium or low growth and are extrapolated out to 2021.

Figure 10: Projected Population Eyre SD 2001-21



(Source: PIRSA 2007)

The graph shows trend lines for the three scenarios. The trends displayed in the above graph are also presented in table format below.

Table 1: Population Projection Table, Eyre SD

	2001	2006	2011	2016	2021
Low	34,020	35,040	35,557	35,398	35,197
Medium	34,020	35,078	36,103	36,520	36,799
High	34,020	35,098	36,404	37,307	38,143

These projections show that by 2011 the Eyre Peninsula population is predicted to be between 35,557 and 36,404 persons, by 2016 population will be between 35,398 and 37,301 and by 2021, 35,197 and 38,143 persons.

The following tables outline the absolute and annual percentage changes in population changes over the assessed time period.

Table 2: Absolute population change over 5 year intervals

	2001-06	2006-11	2011-16	2016-21
Low	1020	517	-159	-201
Medium	1058	1025	417	279
High	1078	1306	903	836

(Source: PIRSA 2007)

Table 3: Average annual growth rates (%)

	2001-06	2006-11	2011-16	2016-21	2001-21
Low	0.59	0.29	-0.09	-0.11	0.17
Medium	0.61	0.58	0.23	0.15	0.39
High	0.63	0.73	0.49	0.44	0.57

(Source: PIRSA 2007)

Conclusions that can be drawn from these tables are;

- For the low growth scenario we can see there is positive growth between 2001 and 2011, but negative growth is predicted from 2011 to 2021.
- Both the medium and high scenarios predict positive growth until 2021, but we can see that after 2011 growth is considerably lower for both scenarios than previous years.
- Predicted annual growth from 2001-2021 for the low (0.17%), medium (0.39%) and high (0.57%) growth projections are all lower than the current South Australian state annual growth average of 0.6%

1.6 Demographic Conclusions

Analysis of past, present and future demographic data has led to the following conclusions;

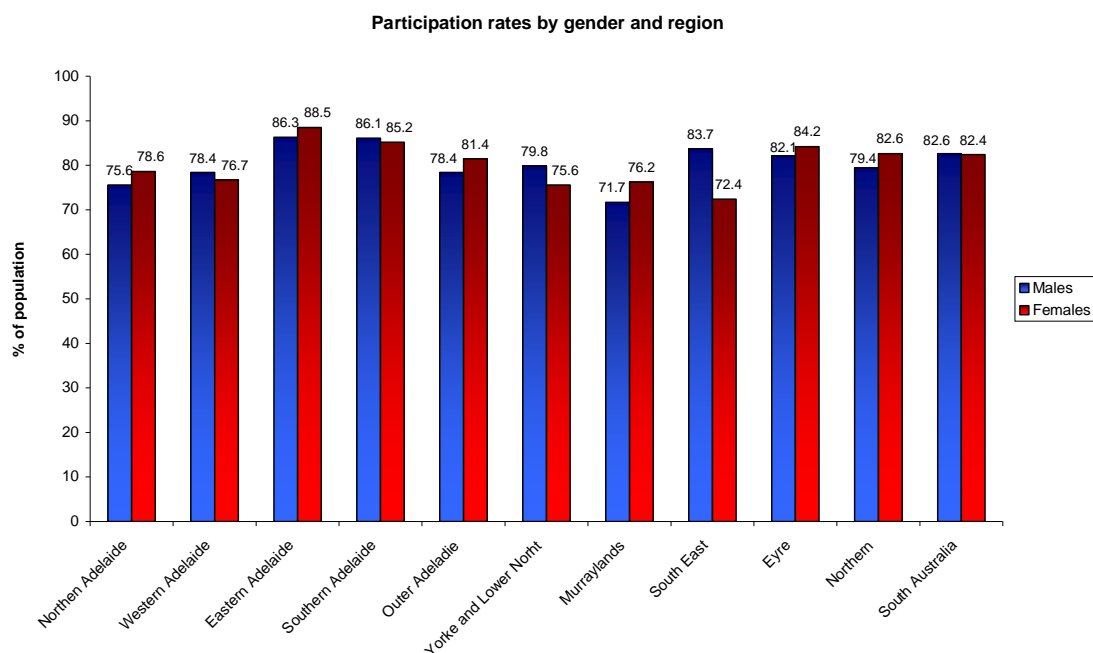
- Population on Eyre Peninsula has been static for the last 10 years
- At least half of the Statistical Local Areas (SLA) making up the Eyre Statistical Division (SD) have experienced negative population growth between 1996 and 2006, the other half have experienced positive population growth
- Whyalla has experienced negative population growth
- The male population in the Eyre region is ageing
- Population prediction indicate that by 2021 the Eyre region will hold between 35,197 and 38,143 persons, a growth rate of between 0.17% and 0.57%
- Predicted annual growth for the Eyre Peninsula region is not of a significant magnitude and is lower than the predicted State average.

2 Participation in Football

In order to gauge a better understanding of what actual numbers are available to play football, it is necessary to investigate sport participation in the region.

The following graph depicts the sporting participation rates for males and females across ten metropolitan and five regional regions in South Australia. The graph also displays the South Australian average for participation.

Figure 11: Participation rates by gender by region (SA)

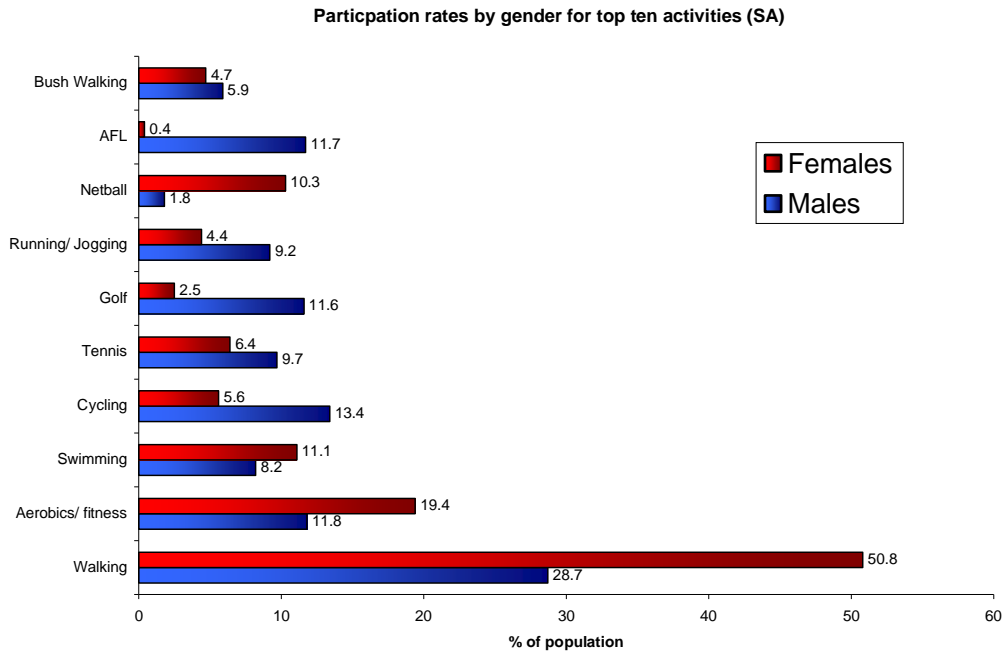


(Source: ORS 2006)

The graphed results show that the Eyre¹ region compared to other regional areas has a relatively high female participation rate (84.2%) which is also higher than the state average of 82.4% when it comes to sport and recreational activities. Statistics show that the male participation rate (82.1%) in the Eyre region is fourth highest for the state and second highest compared to the other regional areas. The male participation rate for Eyre is slightly lower than the state average.

¹ Eyre- this region is bounded by Spencer Gulf in the east, and extends westwards beyond Ceduna to the West Australian border. It extends as far as the Gawler Ranges and included the Nullarbor Plain in the north-west.

Figure 12: Participation rates by gender for top ten activities (SA)



(Source: ORS 2006)

According to figures sourced from the Office for Recreation and Sport (2006) Australian Rules Football (AFL) is in the top ten activities, in terms of the percentage of the population having regular involvement in the above listed activities².

As can be seen from the above graph, AFL has the fourth highest participation amongst males in South Australia, with a participation rate of 11.7%.

² Participation rates are for South Australians aged 15 years and over and are based on participation rates calculated from the boosted 2003 ERAA sample.

2.1 Participation Scenarios

The following section has been prepared to give some indication as to the expected future football player numbers. Some observations have been applied to the forecasted data to enable us to calculate the average number of players per club. The low medium and high growth predications have been used to create a best, average and worst scenario. Different participation rates have also been used to show the affect that an increase or decrease in participation will have.

11.7% is the calculated participation rate for South Australian males in football. Anecdotal evidence suggests that this percentage is much higher in country areas, including Eyre Peninsula. For this reason a participation rate of 22% and 33% have been applied to the forecasted scenarios. The scenario calculation also takes into consideration that football attracts the majority of its participants from the 5-39 age group, thus only this proportion of the male population has been used.

Scenario 1

Scenario 1 assumes a participation rate of 22%. It also assumes that the 27 clubs on Eyre Peninsula will continue until 2021. The table presents the estimated number of players for a given year, per age cohort. The table presents estimated player numbers for the Eyre Peninsula in each of these age groups, for the low, medium or high growth population predications.

Table 4: Estimated player numbers, per age cohort, 22% participation rate

		Low	Medium	High
2006	5-14 group	632	632	632
	15-19 group	255	255	255
	20-39	1018	1018	1018
	<i>Players per Club</i>	<i>71</i>	<i>71</i>	<i>71</i>
2011	5-14 group	641	651	657
	15-19 group	258	262	264
	20-39	1033	1048	1057
	<i>Players per Club</i>	<i>72</i>	<i>73</i>	<i>73</i>
2021	5-14 group	635	664	688
	15-19 group	256	267	277
	20-39	1022	1069	1108
	<i>Players per Club</i>	<i>71</i>	<i>74</i>	<i>77</i>

This table shows that for the years analysed, whether low medium or high growth is achieved, there will be on average 71 players per club. What this table shows through the age breakdown is that although a club may have adequate numbers, a considerable proportion of those numbers are likely to be in the Auskick or Junior teams. For example by 2011, if Eyre Peninsula experiences low growth there will be 1,033 in the senior competition and 899 in the junior competition, if a participation rate of 22% is achieved.

Scenario 2

Scenario 2 predicts what would happen if participation were to increase to 33%. Scenario 2 assumes that 1 in 3 males on Eyre Peninsula between the ages of 5 and 39 participate in football regularly. It also assumes that the 27 clubs on Eyre Peninsula will continue until 2021. The table presented estimated player numbers for the Eyre Peninsula in each of the listed age groups, for the low, medium or high growth population predications.

Table 5: Estimated player numbers, per age cohort, 33% participation rate

		Low	Medium	High
2006	5-14 years	949	949	949
	15-19 years	382	382	382
	20-39 years	1528	1528	1528
	<i>Players per Club</i>	<i>106</i>	<i>106</i>	<i>106</i>
2011	5-14 years	962	977	985
	15-19 years	387	393	396
	20-39 years	1549	1573	1586
	<i>Players per Club</i>	<i>107</i>	<i>109</i>	<i>110</i>
2021	5-14 years	952	996	1032
	15-19 years	383	401	415
	20-39 years	1533	1603	1662
	<i>Players per Club</i>	<i>106</i>	<i>111</i>	<i>115</i>

As the above table shows, if a participation rate of 33% is used there is at least 106 players per club. These results are inline with club survey data which indicates that on average clubs have 100 male players per club. If a participation rate of 33% was achieved and maintained this would indicate, as is evidenced in the table that there were sufficient senior players (in the 20-39 age group) for two senior teams. This table shows that if Eyre Peninsula maintains a participation rate of 33% and experiences low growth there would be 1,549 senior players in 2011 and 1,533 in 2021.

2.2 Participation Conclusions

From the participation analysis, the following conclusions were derived:

- Participation in sport is generally high for residents of Eyre Peninsula
- Anecdotal evidence suggests participation for Australian Rules Football (AFL) is higher than 11.7% in Eyre Peninsula
- There would appear to be sufficient junior members, although this may change from location to location
- Predicted population growth for Eyre Peninsula is not excessively high, therefore the key to securing adequate players is to maintain a high participation rate for Australian Rules Football

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