



“ The number of homes in South Australia is increasing more rapidly than the number of people. ”

Population and Urban Form Issues



Human society has an impact on the environment. The level of its impact depends on a wide range of factors that include the size of the society, levels of production and consumption, the efficient use of resources and the technology used to supply goods and services. The effectiveness of government and other organisations in preventing or repairing environmental degradation is also an important influence. This fact sheet only considers the population component of this relationship, but we must remember that the impact of people on the environment is affected by these other key factors.

South Australia's population growth rate in the two decades after World War II was one of the highest in the country, but it has slowed significantly since 1966. Between 1996 and 2001 the population growth rate recovered slightly and from 2001 to 2006 the population growth rate has increased to 0.7%.

Over 1.5 million people currently live in South Australia and it is estimated that the current population growth rate is around 1% due to major increases in migration over the last two years. South Australia's population growth rate is still below the national level of 1.3% per annum.

Most of the state's population growth is occurring in the Adelaide metropolitan area and near urban areas such as Mount Barker, Victor Harbor, Murray Bridge, Goolwa and the Barossa. This is placing pressure on the availability of land and urban services and increasing the tension between competing uses of land and environmental resources. Regional centres such as Mount Gambier, Roxby Downs and Port Augusta are also increasing in population. The populations of Whyalla and Port Pirie had been in decline for many years, but over the last five years increases have been reported in these regional centres. This is due to the resources boom in the north of the state.

The number of homes in South Australia is increasing more rapidly than the number of people because the population is ageing (older people are more likely to live alone), and because of lifestyle changes. This has increased demand for smaller houses close to the city that could have benefits for the environment with shorter trips to supermarkets and retail outlets but put more pressure on public transport, electricity and water utilities.

Trends



South Australia's population growth is increasing.



The number of new homes being built on redeveloped sites within metropolitan Adelaide is increasing.



The average household size is declining.



The median (average) age of the population of South Australia is increasing.



Population density is increasing in the metropolitan area.

Population and Urban Form



What is the Population and Urban Form Situation?

Pressure indicators

Changes in population growth

South Australia is in a period of rapid population growth (0.7%) when compared to the low population rate of the early 1990s (0.39%). Between 2001 and 2006, the population in South Australia grew by 56,476 people. Despite the increase in population, South Australia's share of the national population has fallen to just 7.6% from 9.4% in 1966.

Components of population change

The birth rate of South Australians has increased over the last several years, after being in decline for many years. This is due to a combination of the 'Baby Bonus' offered by the Commonwealth Government for new parents, and sustained economic growth in the state.

The factors that make up population change are births, deaths and interstate and overseas migration. More and more people are migrating into Adelaide from overseas and this is in part due to Adelaide gaining Regional Migration Status. Potential overseas migrants earn additional visa points if they migrate to South Australia and as a result of this change, the largest overseas migration into the state of 11,281 people was recorded in 2006.

Net interstate migration has been consistently negative and South Australia has lost more people interstate than it has gained. This is one of the major factors responsible for the state's slow population growth rate.

Regional and intra-regional changes in population growth

The predominant trend within South Australia over the past 20 years has been a concentration of population within settled parts of the state. In 2006, 73.1% of all South Australians lived in Adelaide and 8.2% in outer Adelaide. In regional South Australia, the township of Roxby Downs grew considerably and this is due to the Olympic Dam mine expansion.

The general pattern of population change in regional areas is one of stability or decline. The exceptions are areas associated with mineral resource extraction such as Whyalla and Port Pirie, or areas with improvements in the commuting range to Adelaide, such as Murray Bridge and Mount Barker.

These patterns of population growth are important in environmental and planning processes. For example, the relocation of people to the Adelaide Hills will increase the demands on infrastructure provision (water, gas, sewage and electricity) and place greater pressure on biodiversity and agricultural production in these areas.

Population density

South Australia has an extremely low population density of 1.6 persons per square kilometre, reflecting its vast inland arid areas that do not sustain large cities or towns. Adelaide has a much higher population density of 627 people per square kilometre.

The vast majority of the state's population (81%) is clustered in the better-watered south-eastern corner along the coastal plains of Adelaide and in the Adelaide Hills. Population projections suggest that by 2050 this concentration of population will have increased to almost 84.5% unless development is encouraged outside of this area. The increased population on the best-watered agricultural land of the state will place additional pressure on already scarce water and land resources that play an important role in food production.

“South Australia's population growth is increasing.”

Population and Urban Form

What is the Population and Urban Form Situation?

Pressure indicators (continued)

Age structure – an ageing population

Like most developed countries, the population of Australia is experiencing changes in its age structure. Over the last two decades, a greater proportion of the population has been distributed in the older age groups (60+). It is expected that the proportion of elderly in the population will increase from 15.1% in 2006 to 18% in 2016, and even more dramatically after that time.

Trends in housing demand

The number of new dwellings has grown faster than the population growth rate over the last thirty years. The ageing trend of the population and our increasing lifespan means that more time is spent in a household without children and potentially more years of living alone after the death of a spouse. Changes have also occurred from increased levels of marriage break-up and divorce. This continued demand for new dwellings could:

- divert resources to the built environment,
- increase the energy requirements of the state,
- increase the land occupied by housing,
- create potential environmental problems associated with stormwater and wastewater management, and
- increase pressure on agricultural land and water catchments.

On a positive note, this could provide the opportunity to design into developments better use of stormwater and treated wastewater.



Taking Action for Population and Urban Form

Consider the impacts of the built environment you live in. Think about the things you can do to reduce this impact, such as buying energy efficient appliances, planting locally native species in your garden or reducing the amount of waste you produce.



Population and Urban Form



Responding to Population and Urban Form

South Australia's strategic plan includes a population target of 2 million people by 2050. The state government plans to achieve this target by increasing migration of younger people, reducing net interstate migration and increasing the birth rate. The South Australian Government has developed an urban growth boundary to encourage efficiencies in urban development, support public transport usage and protect prime agricultural land.

Impacts of Population and Urban Form



Inland Waters

There are serious issues of wastewater disposal, increased stormwater run-off and pollution in South Australia's important catchment areas.



Biodiversity

Expansion of the city (urban sprawl) will lead to a greater clearance of land, and therefore reduced habitat for native species.



Atmosphere

Urban sprawl means that more and more people will have to travel further, so our dependence on cars for transport increases. This means that more air and noise pollution and greenhouse gas emissions will be released into the atmosphere.



Land Resources

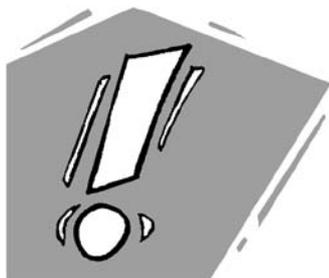
Change in land use to residential land is increasing the impact on the environment and reducing areas where there are prime agricultural lands.



Human Settlement

Redevelopment creates transport and waste disposal issues that need to be addressed.

Population and Urban Form



Attention!!

Urban sprawl or densification?

The term 'urban sprawl' is the spreading (sprawl) of our cities (urban areas). In 1960, Adelaide city was a small centre that spread no more than 15km from the General Post Office. Today, residential development has spread as far north as Gawler (about 40km) and as far south as Port Noarlunga (about 35km).

Densification means increasing the number of people per square kilometre of land. This can be achieved by reducing house (and block) size, increasing the number of apartments or increasing the number of people who live in one house.

The South Australian Government has set a target of increasing the state's population to 2 million people by 2050. In order to accommodate this growth, either urban sprawl or densification will occur and each method has special consequences.

Urban sprawl has many effects on the environment. In particular, there are serious issues of wastewater disposal and increased stormwater run-off and pollution in Adelaide's most important run-off catchment, the Mt Lofty Ranges. Any further development will involve increased waste disposal, increased stormwater run-off from expanded residential developments, effluent release from wastewater treatment plants and increased clearance of native vegetation to make way for housing. Urban sprawl also increases the distances that people need to travel, which has implications for air pollution and the greenhouse effect.

While densification usually means increasing the concentration of people where services like water, electricity, waste management and public transport already exist, these services come under increased pressure when more people are using them. Surprisingly, greenhouse gas emissions can be similar in apartments with inefficient use of energy to large houses in the outer suburbs. This emphasises the need for improved design efficiency.

Decreasing the size of house blocks (or lots) in the suburbs of Adelaide also means that the amount of open space is reduced. Open space is any space which is not built upon, and in many Adelaide suburbs, the majority of this open space is in private gardens, rather than public parks. With more houses on the same space, the level of open space decreases and this can have implications for recreational opportunities, storm water run off, urban biodiversity, neighbourhood character and health.



Population and Urban Form



Research Ideas

about Population and Urban Growth

- 1 What is meant by 'population and urban form'?

- 2 How do urban sprawl and densification affect the environment?

- 3 What does the State of the Environment report tell us about urbanisation in South Australia?

- 4 What might happen in the future if things continue as they are?

- 5 What are government, business and industry doing to address population and urban form issues in South Australia?

- 6 What can we do individually, or in communities, to reduce the impact urbanisation has on our environment?

Resources

For more detailed information on the issue and actions you can take see the State of the Environment report for South Australia 2008.

This is available at:
www.epa.sa.gov.au/soe



This fact sheet is part of a set of 20 fact sheets about the key environmental issues identified in the State of the Environment report 2008, produced for the Environment Reporting Education Resource. You can access the fact sheets and learn more about taking action for the environment at the Education Resource website:
www.epa.sa.gov.au/soe.
 For more information call the Environmental Education Unit of the Department for Environment and Heritage (08) 8463 3911.



Government of South Australia
 Department for Environment
 and Heritage



Printed on 100% recycled, Australian-made paper with vegetable-based inks.