



*Exploring the Impact of an Ageing  
Workforce on the South Australian  
Workers' Compensation Scheme:*

**Chapter 2 Ageing and the South  
Australian workforce**

The Australian Institute for Social Research

by

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prepared for

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# 1 Introduction

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The ageing of South Australia's workforce is one of the State's major policy challenges over the next decade. By early next decade labour demand is expected to exceed supply. To manage this it will be necessary to introduce a range of policies and strategies designed to boost labour force participation and manage skill shortages in innovative ways. Injury prevention and the timely and successful return to work of injured workers will be important elements in achieving this. Understanding the implications of an ageing workforce for workers compensation arrangements in South Australia is timely in the face of such significant demands. This report prepared by the Australian Institute for Social Research (AISR) is designed to assist *WorkCover SA* to better understand and respond to the benefits and challenges associated with an ageing workforce in South Australia.

## 1.1 Project purpose and methodology

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In preparing the report the AISR addresses the following questions identified by *WorkCover SA*.

### A: PROFILING THE SA WORKFORCE

- 1 *What is the profile of the current South Australian workforce in terms of age, gender, cultural background, disability, occupation, and industry?*
- 2 *Using projected population data, what will be the future South Australian workforce (in 10 years; in 20 years) look like in terms of age, gender, cultural background, disability?*
- 3 *What are the current rates of injury, illness and recovery of older workers in South Australia? In comparison to other age groups, are these rates higher, lower, or similar? Can comparisons be made with other States?*
- 4 *In terms of workplace injury and illness, what do research and claims-related data tell us about the risk posed by different age groups? By different occupations? By different industries? What factors interrelate in relation to risk (eg age and occupation)?*

### B: RESEARCH FINDINGS ON THE IMPACT OF AGEING ON ABILITY TO WORK

- 5 *What is known about ageing-related health conditions and ability to work? For example, do trends in increased conditions like cardiovascular disease, arthritic/osteoporotic disorders, diabetes II and obesity, present as greater risks for older workers? What population groups (including age groups) represent the greatest risks of acquiring these conditions? Can these conditions pre-dispose workers to injuries such as, falls?*
- 6 *What is known about older workers in terms of capacity for ongoing learning, re-training and contribution to the workplace? In other words, what does research tell us about the positive impact of older workers in the workplace?*
- 7 *Do research findings assist in developing a model of risk assessment based on the 'trade-off' between ageing-related illness or disability and the positive impact of older workers? Has this modelling been undertaken? If so, what were the findings?*
- 8 *Does existing research establish a relationship between stress-related conditions and age? If so, which age groups appear to be most at risk of acquiring stress-related disorders?*

- 9 *What is known about the relationship between workforce participation and health? What is the likely impact of health promotion and prevention policy on 'healthy ageing' and workforce participation? Conversely what are the likely health impacts of policies designed to increase and sustain workforce participation?*
- 10 *What is the impact of policy and social or economic change on the workforce participation of older workers? For example, are there older workers participating reluctantly due to insufficient superannuation to match expected longevity in living? Or to changes in retirement age, or age pension eligibility?*

#### C: GOOD PRACTICE IN WORKPLACE AGE MANAGEMENT

- 11 *Are there examples of good practice in 'age management' that can be applied in developing workplace cultures that maximise the contribution of older workers while minimising age-related risks for injury or illness?*

#### D: ASSESSING THE IMPACT OF AN AGEING SA WORKFORCE

- 12 *What is the likely impact of the ageing (defined as 55 years and over) workforce for WorkCover SA in terms of the structure of its liabilities?*

These research questions have been explored through a mixed methodology involving –

- o Literature Search and Review
- o Review of policy
- o Case Studies of good practice in age-management drawn from the literature
- o Analysis of ABS, 2006 Census of Population and Health data to develop a South Australian profile of workforce ageing, broader population ageing, and health-related trends by age.
- o Analysis of *WorkCover SA* data relating to claims
- o Identification of factors that need to be taken into account in modelling the likely impact of an ageing South Australian workforce on WorkCover SA's future liabilities.

#### Definition:

Through this report we use the terms 'older worker' or 'mature age worker'. There is no agreement in the research literature about what age separates older workers from others. Some reports include people as young as 40 or 45, others take the ages of 50 or 55 as their reference point, while others use the retirement and pre-retirement ages of 60 or 65. 45 and over has been the age group used by the United Nations and World Health Organisation to encompass older workers, and the Australian Bureau of Statistics (ABS) classifies people aged 45 and over as 'older jobseekers'.

Our view, supported by research findings, is that chronological age is not a relevant marker because there is much variation in pre-disposition to illness and injury due to individual health and fitness as well as genetic factors. It can however, be regarded as a generic guide that enables comparison between different groups of workers for research purposes. Furthermore, human beings can be a number of different ages simultaneously – chronological, biological, and psychological ages, each determining capacity for life and for work. However, the ageing process is unique to each individual (even identical twins do not grow old similarly), and chronological age can be rather misleading when used to describe ageing, for example, in worklife (Ilmarinen, 2005: 127).

Finally, it is clear that workplace interventions are most effective when the focus is on the lifecourse as a whole, because of the importance of health promotion and prevention of illness, education, training, lifelong learning and workplace design.

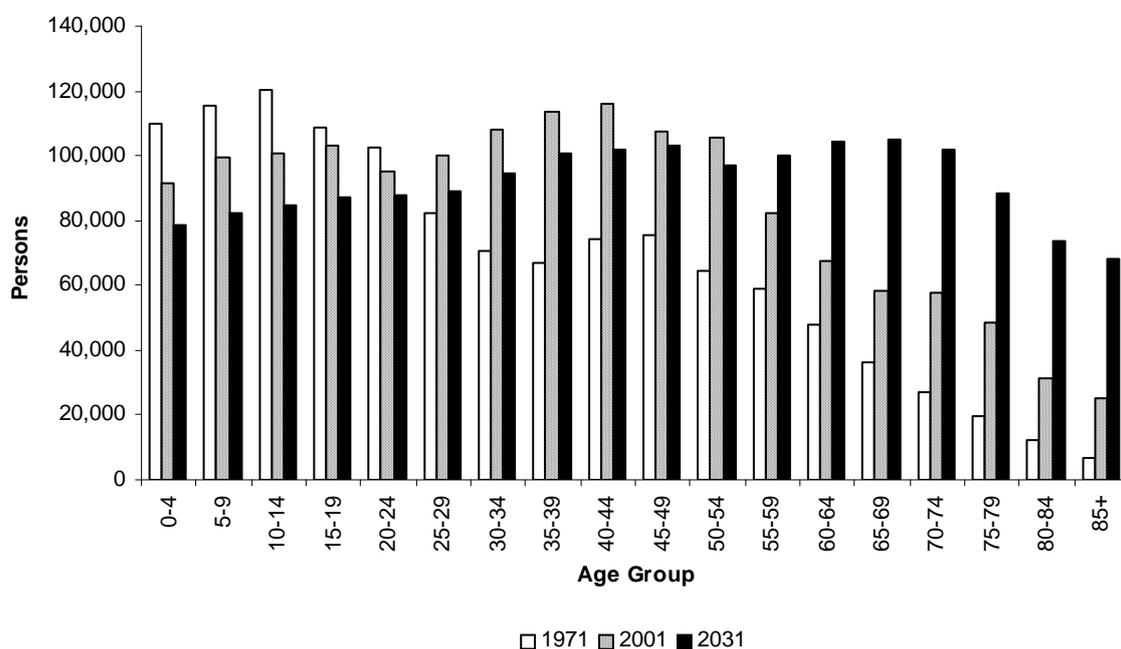
## 1.2 The changing age profile of the South Australian population

Like the nation as a whole, South Australia's population and workforce are ageing. This is a function of the combined impact of lower fertility rates and lower infant mortality as well as the large number of births in the post World War II period (producing the so called *Baby Boomer* generation)<sup>1</sup>. Furthermore, the impact of the Baby Boomer years is exacerbated by the low levels of fertility prior to 1946 and following 1965.

South Australian population ageing is part of a broader national demographic trend, which in turn, is consistent with population ageing in other OECD countries. One-quarter of Australians will be aged 65 years or more by 2044-45, approximately double the present proportion. As more people move into older age groups, overall workforce participation rates are projected to drop from around 63.5% in 2003-04 to 56.3% by 2044-45 (in the absence of significant policy intervention and based on current participation rates by people aged 55 and over) (Productivity Commission: 2005).

**Figure 1** illustrates the shift over the sixty years from 1971 to 2031 in the State's population profile, from one that was predominantly young to one that is predominantly ageing. By 2012 there will be more South Australians who are aged over 65 than are aged less than 15 - for the first time in the State's history (Hugo: 2008).

**Figure 1: South Australia: Population by 5-Year Age Cohort, 1971, 2001 and 2031**

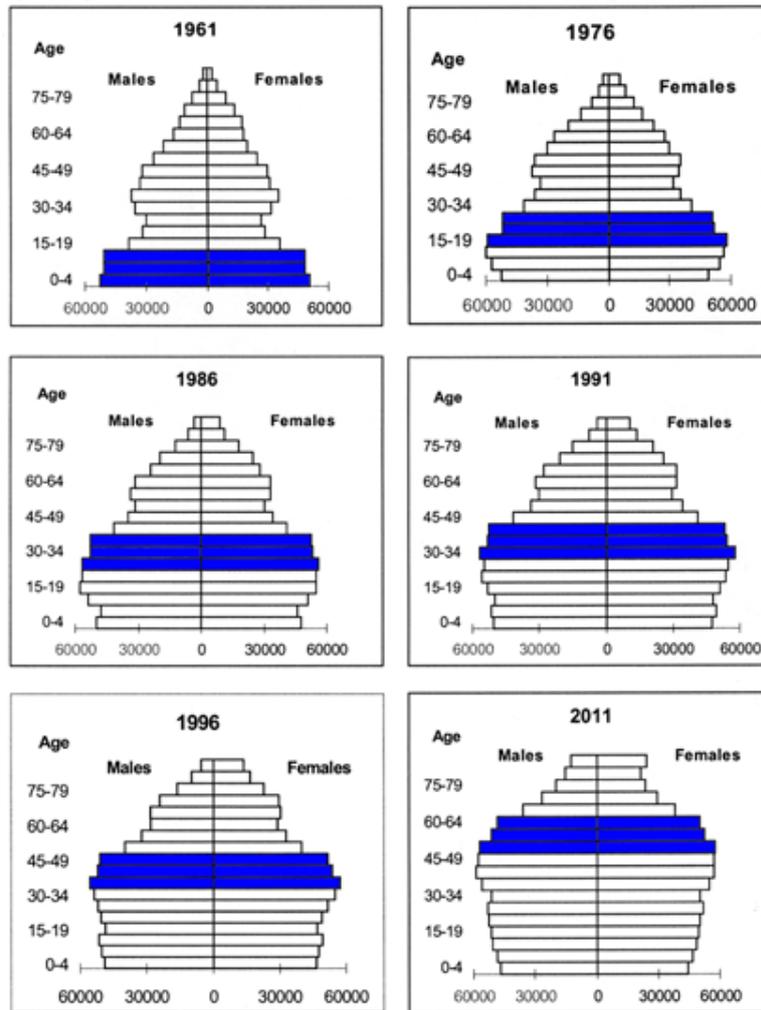


Source: Hugo (2008) using ABS population data

The impact of the ageing of South Australia's Baby Boomers is illustrated in **Figure 2** which shows the movement of that cohort through the population over the fifty year period 1961-2011 and the subsequent shift in the State's age profile.

<sup>1</sup> Baby Boomers are usually considered to be those born during the period 1946 to 1965

**Figure 2:** South Australia: Age and Sex Structure of the Population, 1961-2011



Source: Hugo (2008) based on ABS Censuses and Projections

The net result of population ageing is expected to result in the **median age** of South Australians rising from 37.6 years in 2001 to between 42 and 45 years by 2031 (Planning SA: 2007). It is projected that there will be a loss (and therefore a need for replacement) of **one third** of the State's workforce over the next two decades as the baby boomers retire (Hugo: 2008) – assuming that most leave at traditional retirement age, or earlier (in response to previous policy that encouraged retirement at 55 years).

It is also the case that the Baby Boomers are not a homogenous cohort – there is substantial diversity within the cohort based on gender, educational level, health and a range of other factors, all of which will affect workforce participation and the decision to retire. **Section 1.4** overviews key policy, social and economic changes that are affecting the participation of mature age people in the labour force.

### **1.3 Other factors shaping South Australia's population**

Hugo (2008) emphasises the importance of linking population policy to broader social, economic and political change, and ageing must also be located against other factors that shape a population's profile. The South Australian government's population policy (Government of

South Australia: 2004) was developed in response to the challenges presented by slow population growth, low and falling fertility rates and a rapidly ageing population. ABS data confirmed the slow growth rate of the State's population at the time of the 2001 Census (0.5% compared with 1.2% for Australia as a whole), reflecting low economic and population growth during the 1990s. However, South Australia has subsequently achieved a population growth rate of 1.0% (in 2006-2007) which is the most rapid annual rate of population growth the State has experienced since 1983. While lower than the national average of 1.5%, it exceeds ABS projections and approximates those of Planning SA (2005). If this annual growth rate is maintained, it will see South Australia reach its target of 2 million people by 2034, rather than 2050 - which is the goal set by State government population policy (Hugo: 2008).

South Australia's increased population growth can be attributed to two main factors -

- o *Natural increase* (births minus deaths) has been evident since 2002-2003 but has been growing significantly between 2005-06 and 2006-7. During this period the fertility rate has shown an 8.3% increase, which is faster than that of Australia as a whole and has exceeded expectations.
- o *Net migration* is responsible for the greatest part of the growth in population. Net gains from international migration have more than quadrupled between 2001-02 and 2006-07 - an increase which, if it continues, will produce the second large post-World War II migration (following the 1950s and 1960s). This is very much due to the State government's promotion of the *State Specific and Regional Migration System*, with South Australia having become the destination of between approximately 16.0% and 37% of all immigrants to Australia between 1998 and 2007. Although net migration loss to other Australian States has continued, **total net migration**<sup>2</sup> has increased at a level that exceeds the targets set in the State Strategic Plan (Hugo: 2008).

With regard to interstate migration, outflow largely involves a loss of skilled and highly educated young people while inflow mainly involves older and less well off people - creating a major population challenge for the State, and its workforce (Hugo: 2008). The increase in population due to overseas migration can be expected to increase the number of younger workers and the number of workers from diverse cultural backgrounds - requiring employers to provide more culturally inclusive workplaces that remove barriers based on culture and on language.

Although migration is an important influence on population growth, fertility levels have more far reaching impact and this is recognised in the State's population policy which aims to sustain fertility at the Australian average or better. Although women in Australia and South Australia would like to have, on average, two children, they are having 0.3 less, indicating the need to remove the barriers preventing them from realising their preference (Hugo: 2008). A key workplace factor is the capacity to provide family-friendly conditions while policy that supports paid parental leave and accessible child care will also be critical in removing disincentives to combining child rearing with workforce participation. Broader work-life-balance initiatives become increasingly important in the face of under-achievement of fertility rate targets.

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<sup>2</sup> ie net interstate migration plus net overseas migration.

## 1.4 Policy, social and economic change affecting older workers

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### Research Question Addressed

- *What is the impact of policy and social or economic change on the workforce participation of older workers?*

Workforce ageing is occurring against a broader landscape of economic, social, technological, environmental and political change. Collectively, these changes are having a profound impact on the way people live and work, and on the relationship between both.

Changing labour market conditions have seen mature aged employees being encouraged to pursue early retirement<sup>3</sup> in times of under supply of jobs, and in recent years, encouraged to delay their retirement in the face of skill shortages and the expected departure from the labour force of many Baby Boomers who are now reaching retirement age. Governments in developed countries have been introducing a range of measures to encourage and enable older workers to remain in the paid workforce. These measures include removing compulsory retirement ages, raising the entry age for aged pensions, enabling flexible retirement, and addressing direct and indirect discrimination<sup>4</sup>. Active labour market measures that are designed to integrate older workers, for example, financial incentives for employers who hire mature aged people, are also evident, but their impact is not yet evident (Taylor: 2006).

Since 1996, the Australian Government has implemented a number of policies that are designed to encourage workforce participation and remove disincentives to this – for example, changed superannuation arrangements, removing barriers for older people to participate in paid employment, and increasing the flexibility of the labour market (Australian Government: 2005). Interventions include removal of the restriction on access to superannuation by those in employment to enable older workers to move gradually into retirement by supplementing reduced employment earnings with superannuation entitlements. Services designed to assist mature age job seekers to find work have been a feature of both federal and state government policy.

The Australian Government's Productivity Commission has produced several reports analysing the economic impact of an ageing population in order to shape policy in a number of areas. The 2004 *Economic Implications of an Ageing Australia* report reinforced the importance of prolonging workforce participation in employment, and of ensuring that older workers (and all workers) had the necessary skills to do so. The Productivity Commission has made it clear that immigration cannot resolve the loss of labour force, and that increasing taxes is not sustainable. Instead, it points to addressing the source of the challenge – sustaining and supporting workforce participation (for example, through flexible working arrangements).

Policies to encourage workforce participation by older workers have been particularly apparent in European Union countries. In March 2001, the European Council of Stockholm set a target of 50% of workers aged 55 to 64 years being in paid employment by 2010. The Stockholm target was reinforced by the goal set a year later by the 2002 Barcelona European Council which sought by 2010 to increase the average age at which people stop working by five years. Analysis of progress

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<sup>3</sup> The age of 55 is often the target age for early retirement and has been encouraged by employers, trade unions and workers themselves

<sup>4</sup> For example, the European Council Directive 2000/78/EC required all EU countries to legislate by 2006 against age-based discrimination in labour market activities and vocational training.

undertaken by the European Commission in 2003 found that only three countries – Finland (50.9%), Sweden (69.1%) and the UK (56.2%) – had achieved this.

By comparison, Australia can be seen as doing better than most European countries in retaining mature age workers. Australian 2006 Census data show that 52.7% of people aged 55 to 64 are in the workforce – a higher proportion (60.4%) are men while a lower proportion (44.4%) are women.

The promotion by governments of early retirement has been found by some researchers to have contributed to ageist expectations about the capacity of older workers to remain in the labour force, with a downward negative impact on how workers in their 40s are viewed by managers and supervisors (Guillemard: 2004). Higher rates of unemployment and age-based discrimination regarding vocational training experienced by mature age workers have been documented in most OECD countries, including Australia (Taylor & Urwin: 2001; Taylor: 2006). The shift in expectations towards the continued participation of older workers to support labour market shortages cannot occur overnight given pre-existing expectations, and requires ownership by employers, trade unions and workers – not just government policy makers. Walker (1997: 686) has described the growing discrepancy of increasing life expectancy and low labour market participation of older workers as the '*age-employment paradox*'.

In assessing progress towards the Stockholm target, the European Commission (2003) argued that it was not sufficient to ensure those aged 55 to 64 remained in work, but the challenge included enhancing the employability of workers currently in their 40s and 50s (Taylor: 2006). It will also be important to monitor the quality of work provided to older workforce members.

Apart from achieving major shifts in expectations, workplaces will need to make equally major shifts in the conditions they provide in order to enable older workers to remain productive, safe, healthy and motivated to continue in paid employment. Changes are needed at both workplace (micro) level and labour market (macro) level. This is where '*age management*' has a crucial role to play – see *Chapter 4*.

The labour market driven policy of encouraging mature aged workers' ongoing workforce participation is supported by policy from ageing portfolios in developed countries, including Australia, that promote '*active*' or '*productive*' ageing. Australian ageing policy now reflects the heterogeneity of the experience of growing older. Where once policy was restricted to making provision for the care and support of frail and dependent people and their carers, in recent years increased emphasis has been placed on '*positive ageing*'. In turn, the needs of a group sometimes described as the '*young-old*' have been highlighted, with programs supporting healthy lifestyles, lifelong learning, the development of IT-related skills, and the promotion of the contribution made by older people. The importance of *early intervention* is evident, ensuring that people have the information and connections needed to reduce dependency and to manage functional loss effectively.

Ageing policy in Australia and other OECD countries is further supported by health promotion policies that encourage healthy lifestyles and the prevention of ill health. Productive ageing and health promotion policies require a '*life course*' approach, that is, one that intervenes early in adult life with a preventive focus, as opposed to previous ageing-related policies that were more reactive and focused on the care of frail older people only. Unlike their parents' and previous generations, the Baby Boomer generation has been exposed to these proactive policies and this should mean that not only will they live longer, but with a better quality of life.

*The objective of a comprehensive strategy should be to maximise each individual's capacity to participate over his or her whole life cycle .... Prevention is the key to a successful integration of people in the labour market (European Commission, 2002: 9).*

## 2 Ageing and the South Australian workforce

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This chapter provides a profile of South Australia's current and projected workforce, together with an overview of available data on age-based workplace injury and illness.

In June 2008, the Economic Development Board released its *Review of Skills and Workforce Development in South Australia* report (Keating: 2008). The Keating Report is the most recent in a series of reports commissioned by or undertaken by the State Government to address current and emerging skill and workforce development issues facing South Australia<sup>5</sup>.

The Keating Report findings draw on the most recent projections being used by the State Government in forecasting the demand for labour and these include an analysis of the impact of major projects being planned in South Australia over the next decade. In quantifying workforce demand and supply, the Review has taken into account the following variables –

- o 'expansion demand' arising from economic growth, including from major projects
- o 'replacement demand' arising from population ageing and replacement of workers who retire, who move between occupations, or leave the workforce to undertake unpaid activities like care giving, or because of poor health.

The Review findings estimate that over the next decade (between 2007-08 and 2017-18) –

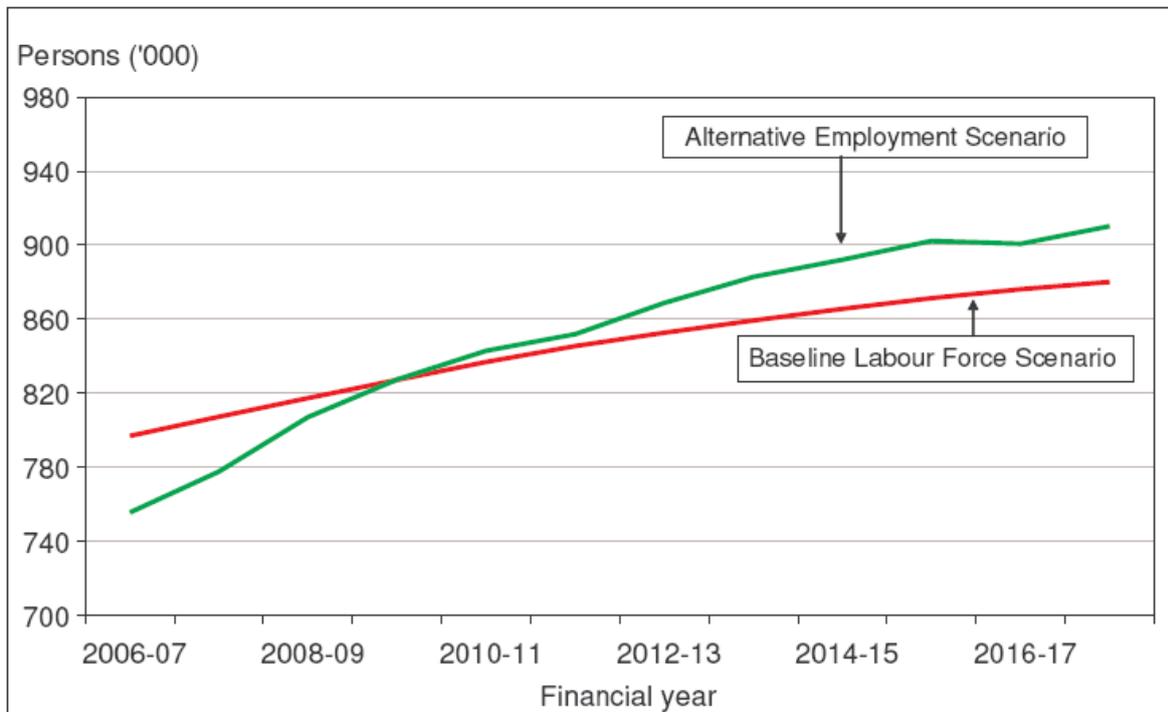
- a) *Expansion demand* due to growth in the South Australian economy is expected to create **133,000 new jobs** (Keating: 2008).
- b) The number of net job openings from *replacement demand* is likely to be in the order of **206,000** – significantly more than estimated through growth in the economy. Due to the ageing of the workforce, the annual level of replacement demand rises over the decade (Keating: 2008).
- c) Therefore the Keating Report estimates that the combined impact of major projects plus the need to replace workers who exit the labour market or move between occupations results in *total job openings* over the decade in South Australia of some **339,000** (Keating: 2008).

Current trends in *labour supply* suggest that South Australia could have insufficient workers to meet the potential demand within just a few years from now, in the absence of major policy interventions. This is shown in Figure 3 below (taken from Keating: 2008).

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<sup>5</sup> See for example, the South Australian Workforce Development Strategy – *Better Skills, Better Work, Better State*, and Schofield, K (2003), *Skills South Australia – Final Report of the Ministerial Inquiry, Skills for the Future*.

**Figure 3: Potential labour demand compared with current trends in labour supply, South Australia**



Source: reproduced from Keating: 2008

Figure 3 indicates that the relationship between labour supply (labelled 'Baseline Labour Force Scenario' in the chart) and demand for labour (labelled 'Alternative Employment Scenario') will change dramatically, shifting from an excess of supply over demand to one of under supply of labour. This shift is occurring now, with a cross-over occurring around 2009-10 after which demand remains higher than supply until at least 2016-17. As a result, it is critical that action is taken as soon as possible to boost labour force participation (Keating: 2008). This will require the development of innovative workforce development strategies that attract and retain people in the workforce. In order to meet under-supply, a key strategy will involve retaining mature age employees, and attracting under-employed groups, including people with a disability.

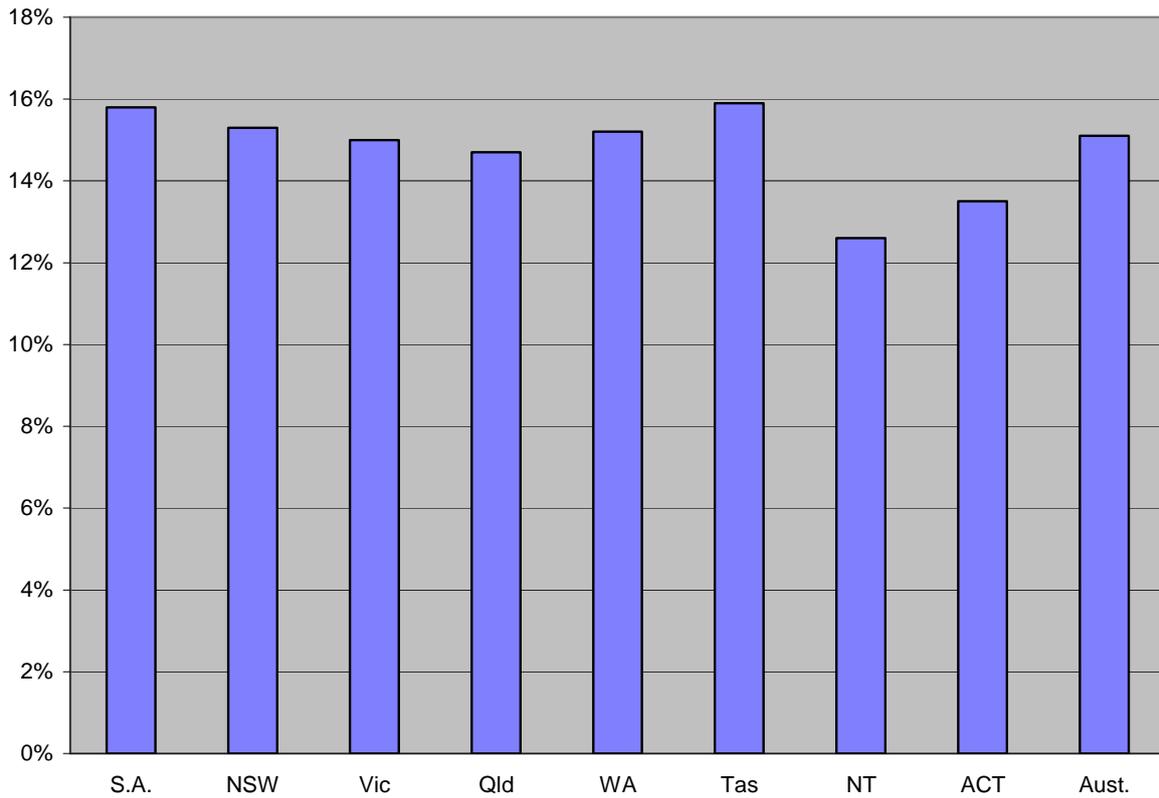
## 2.1 Profile of the South Australian workforce

### Research Questions Addressed

- *What is the profile of the South Australian workforce in terms of age, gender, cultural background, disability, occupation and industry?*
- *Using projected data, what will the future South Australian workforce look like?*

Population and workforce ageing are more pronounced in South Australia than in most other States. At the time of the 2006 Census South Australia had the second oldest workforce of all States and Territories with **15.8% or 109,020** persons aged 55 and over (ABS: 2006). **Figure 4** shows that only Tasmania has a higher proportion of people aged over 55 than South Australia.

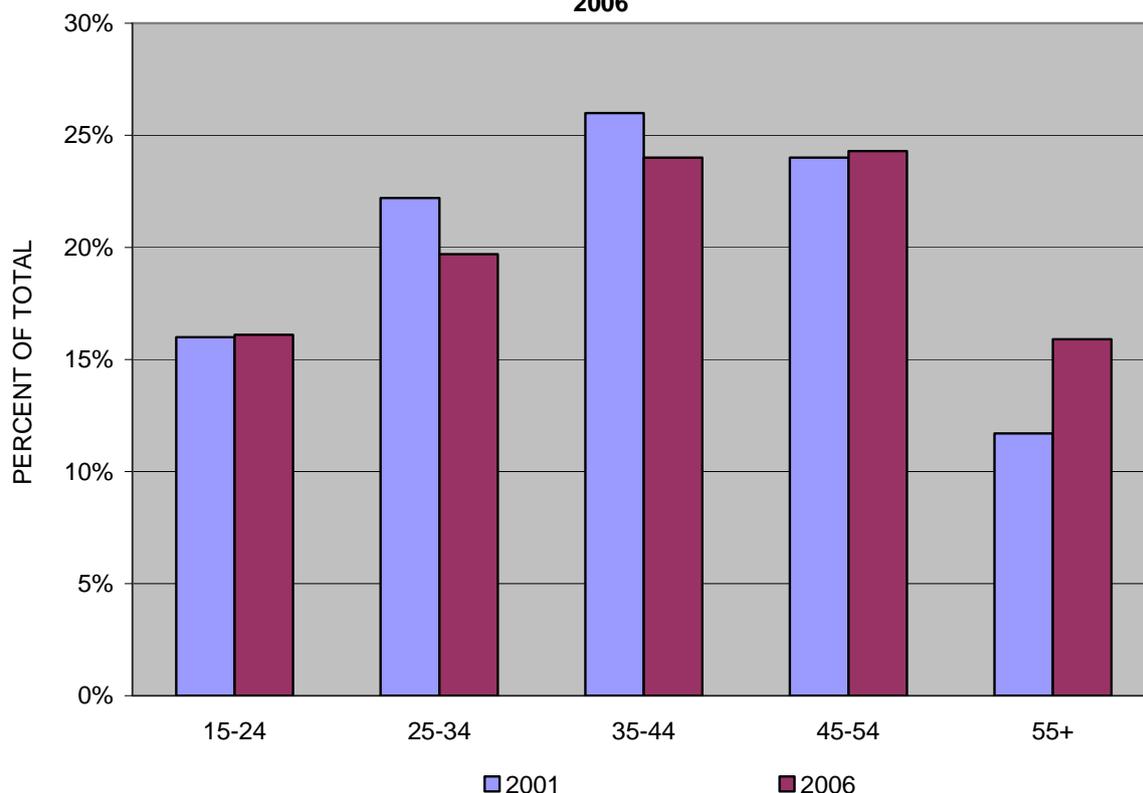
**FIGURE 4: PERCENTAGE OF WORKFORCE AGED 55 AND OVER, 2006**



Source: ABS 2006 Census data

The age profile of the South Australian workforce (2001 to 2006) is illustrated in [Figure 5](#) which shows that there has been a considerable increase in mature aged employment between the 2001 and 2006 Census periods. Across all age groups, the most significant increase has occurred for those aged 55 and over. In 2006, this group accounted for 15.9% of total employment in South Australia, up from 11.7% in 2001.

**FIGURE 5: AGE PROFILE OF WORKFORCE - SOUTH AUSTRALIA 2001 AND 2006**



Source: ABS Census data

### 2.1.1 Gender profile of the South Australian workforce

The labour force participation of men and women has shown significant change over the past 20 years – see [Table 1](#). For men, participation in the labour force since 1986 has fallen in each age group except those aged 55 and over. Conversely, women – except those under the age of 24 – have increased their participation since 1986. In some cases, the increases are significant – for example, the participation rate for women aged 55-64 has more than doubled over this period.

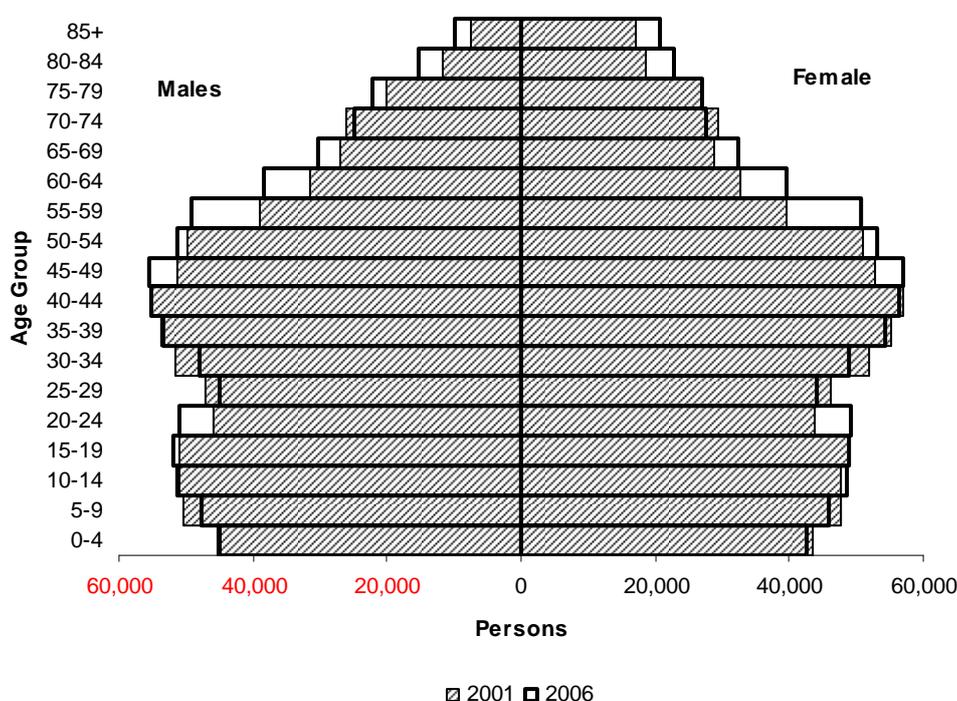
As [Figure 6](#) shows, population gains have been most noticeable in the **45 years and over age** group (and particularly those aged **55 to 59**), and the pattern of ageing over the 5 year period to 2006 has been similar for both women and men. However, there has also been growth in the 20-24 age group due to the substantial influx of foreign students studying in South Australian tertiary institutions (Hugo: 2008). This illustrates the importance of migration in lowering the age profile of a population and in helping to compensate the net outflow of younger, more highly educated and skilled South Australians to other parts of Australia (as discussed in [Section 1.3](#)).

**Table 1: Changes in workforce participation by age and gender, South Australia, 1986-2006**

Age group	Males				Females			
	1986 (%)	1996 (%)	2001 (%)	2006 (%)	1986 (%)	1996 (%)	2001 (%)	2006 (%)
15-19	56.8	48.2	48.8	49.1	56.1	48.6	50.5	53.0
20-24	89.8	82.9	81.7	79.2	75.0	74.0	74.8	74.1
25-34	93.8	88.7	87.2	85.0	61.4	65.7	67.6	70.2
35-44	93.4	88.6	86.7	84.6	65.5	70.5	70.9	72.8
45-54	88.7	85.0	83.6	82.8	53.7	66.8	70.7	75.0
55-64	59.8	55.6	58.7	62.9	21.1	27.6	35.8	45.7
65 and over	7.6	7.8	8.8	10.6	2.5	2.6	3.4	4.2
<b>Total</b>	<b>74.3</b>	<b>67.9</b>	<b>66.5</b>	<b>65.0</b>	<b>47.9</b>	<b>49.8</b>	<b>51.3</b>	<b>53.3</b>

Source: Sharp & Broomhill: 2005; ABS Census data

**Figure 6: South Australia: Age and Sex Distribution of the Population, 2001 and 2006**



Source: Hugo (2008), based on ABS Censuses and Projections

Despite the significant increase in female labour force participation, occupational and industry gender-based segregation has remained largely unchanged over the past few decades and women generally continue to occupy a specific and frequently disadvantaged labour market position (Sharp & Broomhill: 2005). The occupations and industries in which women employees are clustered continue to attract the lowest rates of pay, and are often considered low-skilled or unskilled with little opportunities for training, including in occupational health and safety. Women predominate in part-time and casual employment – employment situations characterised by lower level of entitlement to sick leave, annual leave and superannuation (Sharp & Broomhill: 2005). According to ABS data cited by the Equal Opportunity for Women in the Workplace Agency (EOWWA: 2008), as at November 2007, women’s average weekly earnings (full-time ordinary time earnings) were 84.2% that of men’s – a national gender pay gap of 15.8%.

Women currently account for some 32% of all *WorkCover SA* claims<sup>6</sup>. While this may appear low compared with their labour force participation (as women comprise around 46.4% of the workforce), in reality it reflects the part-time nature of women's employment<sup>7</sup> and the fact that women are under-represented in many of the occupations which account for a significant proportion of total claims (for example, labourers and tradespersons). Therefore, analysis of the likelihood of claims from women in the labour market should not be based on their share of total claims.

A number of broad conclusions relating to women's labour force participation warrant attention:

- As female labour force participation is increasing, and especially within older age groups, workplaces need to adapt their workplaces to accommodate older women in a workplace environment that acknowledges both health issues and care-giving responsibilities (eg for older relatives or partners). The expected participation by older women in the workforce can also be linked to their greater longevity, compared with men (*see Section 1.2, Figure 2*).
- Low levels of superannuation held by many mature age women are likely to have the impact of prolonging workforce participation.
- The care-giving of older relatives or partners may have a negative impact on health and the propensity for injury, which in turn, will affect women's workplace productivity and may enhance the risk of workplace injury (for example, due to musculoskeletal strain, or higher levels of stress), or compound workplace injury or illness.
- As women are overrepresented in 'precarious' employment situations, in some cases they are more at risk of a workplace injury due to the lack of adequate training and unsafe working conditions associated with such employment.
- As older people have a greater incidence of injury than younger ones (detailed later in *Section 2.2.3*), and workforce participation among older South Australians is increasing – especially among women – the risk of injury requiring income maintenance is likely to increase.

### **2.1.2 English language proficiency of the South Australian workforce**

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The encouragement of increased levels of immigration is a key component of South Australian government population policy (as discussed in *Section 1.3*) and this will affect workplace culture while requiring accommodation for different language and cultural backgrounds. In addition, the large scale immigration to Australia during the post World War II period occurred at a time when English proficiency was not a required condition of entry or assisted as part of the settlement process. Those who migrated then are now ageing, and at a greater rate than the Australia-born population. At the same time, many face significant English language barriers.

This means that workplaces will have a cohort of ageing workers from non English speaking backgrounds with low levels of English language proficiency, and a newer cohort of younger migrants, some of whom will arrive under humanitarian programs - the Horn of Africa will be a key source – (Hugo: 2008). These changes in the workforce's linguistic and cultural profile will require a range of adjustments to ensure that workplaces are culturally inclusive, in relation to workplace health and safety and to broader workplace culture.

Proficiency in English language is important for workplace injury as it relates to the ability to communicate effectively within the workplace and to understand occupational health and safety

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<sup>6</sup> Based on an analysis of claims data for 2006-07 provided to AISR by WorkCover.

<sup>7</sup> At the time of the 2006 Census, women comprised 70% of total part-time employment in South Australia (ABS: 2006).

information. There are 32,700 South Australians who rate themselves as not proficient in English and almost half of them (46%) are in the prime workforce ages of 15-64 – see [Table 2](#).

**Table 2: Proficiency in Spoken English/Language by Age Group - 2006 Census**

Age group	Speaks English only	Speaks other language & speaks English well or very well	Speaks other language & speaks English not well or not all	Speaks other language & proficiency in English not stated	Not stated	Total
0-4 years	74,174	3,534	3,816	1,331	4,478	87,333
5-14 years	168,683	15,918	1,649	297	6,944	193,491
15-24 years	166,872	23,396	1,819	327	8,451	200,865
25-34 years	152,455	22,731	2,326	310	7,925	185,747
35-44 years	181,683	25,097	3,466	361	8,456	219,063
45-54 years	184,102	20,792	3,903	266	7,825	216,888
55-64 years	151,678	16,130	3,647	211	6,155	177,821
65-74 years	90,688	13,962	5,526	195	4,727	115,098
75-84 years	67,863	9,222	4,995	170	5,184	87,434
85 years & over	24,583	1,914	1,595	63	2,442	30,597
<b>Total</b>	<b>1,262,781</b>	<b>152,696</b>	<b>32,742</b>	<b>3,531</b>	<b>62,587</b>	<b>1,514,337</b>

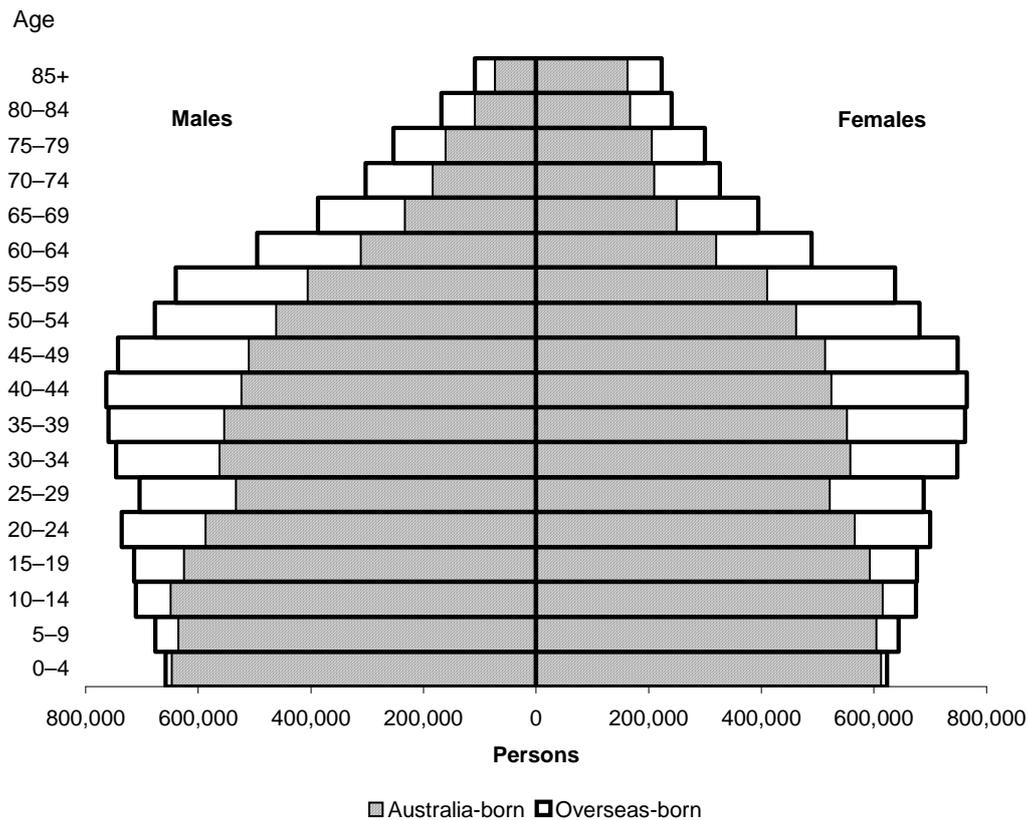
Source: ABS 2006 Census data

While this represents a small proportion of the overall population (2.2%) it is important to note that a further 66,118 people (4.4%) have not stated their proficiency. Given that the pertinent question in the Census provides the option of describing proficiency in positive terms, we suggest that the total proportion of the population who are not fluent in English is nearer to 6.6%, while 10% of people for whom English is not their first language regard themselves as proficient.

Further analysis of ABS 2006 Census data shows that of those employed people who do not speak English well (or not at all), the largest numbers are concentrated within *manufacturing*, followed by the *accommodation and food services* industry, and *agriculture forestry and fishing*.

[Figure 7](#) depicts the age profile of the overseas-born compared to those born in Australia. The profile indicates that the number of elderly born overseas can be expected to increase over the next decade. Particular attention should be paid to the Non English Speaking origin component of older people both nationally and in South Australia. Census data (ABS: 2006) reveal that they have been growing much faster than both the Australia-born and the overseas-born from Mainly English-Speaking (MES) countries.

**Figure 7: Age and Sex Structure of the Australia-Born and Overseas-Born Population, 2006**



Source: reproduced from Hugo: 2008 based on ABS Censuses

### 2.1.3 Disability and the South Australian workforce

The proportion of the workforce with a disability, whether present from birth, or acquired due to accident, illness or as part of the ageing process, will increase over the next few decades. People with disabilities present from birth are living longer, and as the population ages, the number of people with acquired disability will also increase. Consequently, workplaces will need to be designed to prevent or minimise the acquiring of work-related disability and to accommodate increasing numbers of workers with some form of disability.

Research by the ABS (2003) identified 20% of Australians reporting some form of disability. A further 21% had a long-term health condition that did not restrict their everyday activities. The remaining 59% had neither a disability nor a long term health condition. Other findings from this survey follow.

- o The unemployment rate for people with a disability at that time was 8.6% compared to 5% for those without a declared disability.
- o Only 53% of people of working age with a disability were in the labour force, compared to 81% of people without a disability.
- o People with a disability were more likely to work part-time than those without a disability.
- o 15.2% of people with a disability reported that the cause of their main health condition was accident or injury, 14% that it was disease, illness or heredity, and 11% that it was 'Working conditions, work or over-work'.
- o Using data adjusted to account for differences in age structures, South Australia, Tasmania and Queensland had the highest disability rates (23%).
- o Physical conditions were the most common form of disability (84%).

- o The disability rate increased with age, reaching 92% for those aged 90 years and over.

Workplace challenges involved in providing disability-friendly work environments can be expected, in most cases, to increase in proportion to the severity of a disability. The 'Core Activity Need for Assistance' variable has been developed by the ABS to measure the number of people with a profound or severe disability<sup>8</sup>. Approximately 68,000 people in South Australia have a profound or severe disability, and some 5,200 of them are currently employed, the majority in **part-time** jobs (ABS: 2006).

It is likely that widespread skills shortages will see under-employed people with a disability encouraged to enter the labour force, and government policy at national level, through the *Welfare to Work* initiative, has provided a framework for this to occur.

**Table 3** depicts the age-related nature of acquired disability<sup>9</sup>, showing that the incidence of disability nationally has increased between 1981 and 2003, and is concentrated in older age groups. Specifically –

- o In 1981, 13.2% of Australians aged 35 and over had some form of disability. By 2003, this had increased to 20.0%, with an ageing population being the key influence.
- o However, the proportion of people with a declared disability had also risen over the same period in all age groups. This could be due to a number of factors, including great advances in medical technologies which are enabling people with disabilities to live longer, albeit with chronic conditions.
- o It can be seen that disability increases with age. In 2003, 14.2% of people aged 35 to 44 had a disability, compared with 30.3% of those aged 55 to 59 and nearly 68% of those aged 75 and over.

**Table 3: Australia – Proportion of Population with Disabilities/Handicaps, 1981 to 2003**

Age group	1981 (%)	1988 (%)	1993 (%)	1998 (%)	2003 (%)
35-44	10.8	11.8	12.4	14.2	14.2
45-54	16.7	17.4	18.4	20.9	21.6
55-59	25.6	25.5	28.2	31.7	30.3
60-64	29.7	29.7	33.9	36.0	38.9
65-69	33.1	41.5	39.5	40.5	40.6
70-74	38.5	48.2	53.1	49.8	49.6
75 and over	53.1	63.4	64.0	67.5	67.9
<b>All People</b>	<b>13.2</b>	<b>15.5</b>	<b>16.6</b>	<b>18.8</b>	<b>20.0</b>

Source: ABS data quoted in Hugo (2008)

<sup>8</sup> People with a profound or severe disability are defined as needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a disability, long term health condition (lasting six months or more), or old age.

<sup>9</sup> 'Disability' was defined by the ABS as any limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities. Examples range from hearing loss requiring use of a hearing aid, to difficulty dressing due to arthritis, to advanced dementia requiring constant assistance.

## 2.1.4 Occupation-based ageing in the South Australian workforce

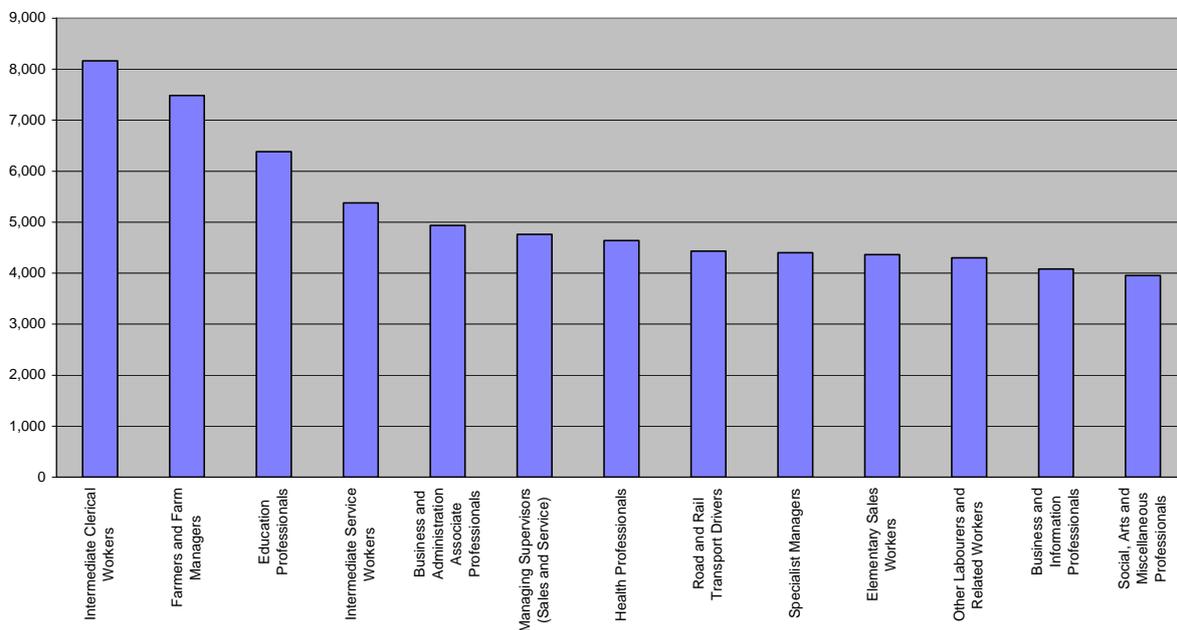
Some occupations and industries have considerably older workforces compared with the workforce as a whole. This may not of itself bring greater numbers of *WorkCover SA* claims (because injury rates between industries and occupations are influenced by a number of factors, not least of which is the type of work done). However, if workforce ageing in general is associated with higher incidence and frequency of claims, then occupations and industries with *significantly ageing workforces* are more likely to be at the forefront of these trends.

**Appendix 1** lists all South Australian occupations (at the 2-digit level according to the ABS occupational classification) ranked from oldest to youngest and compared with Australia. Many of the older occupations are in *clerical and professional* occupations. The fact that many white collar occupations have an 'older' age profile may in part reflect that there are high rates of early exits from 'manual' occupations of tradespersons and labourers. Occupations with the **lowest** proportion of workers aged 55 and over in South Australia are those in sales and service occupations, certain trades and labourers and related occupations (ABS: 2006).

As **Figure 8** indicates, the occupations with the **highest** number of workers aged 55 and over in South Australia are -

- o Intermediate clerical workers
- o Farmers and farm managers
- o Education professionals
- o Intermediate service workers.

FIGURE 8: TOP 10 OLDEST OCCUPATIONS BY NUMBER, SOUTH AUSTRALIA 2006

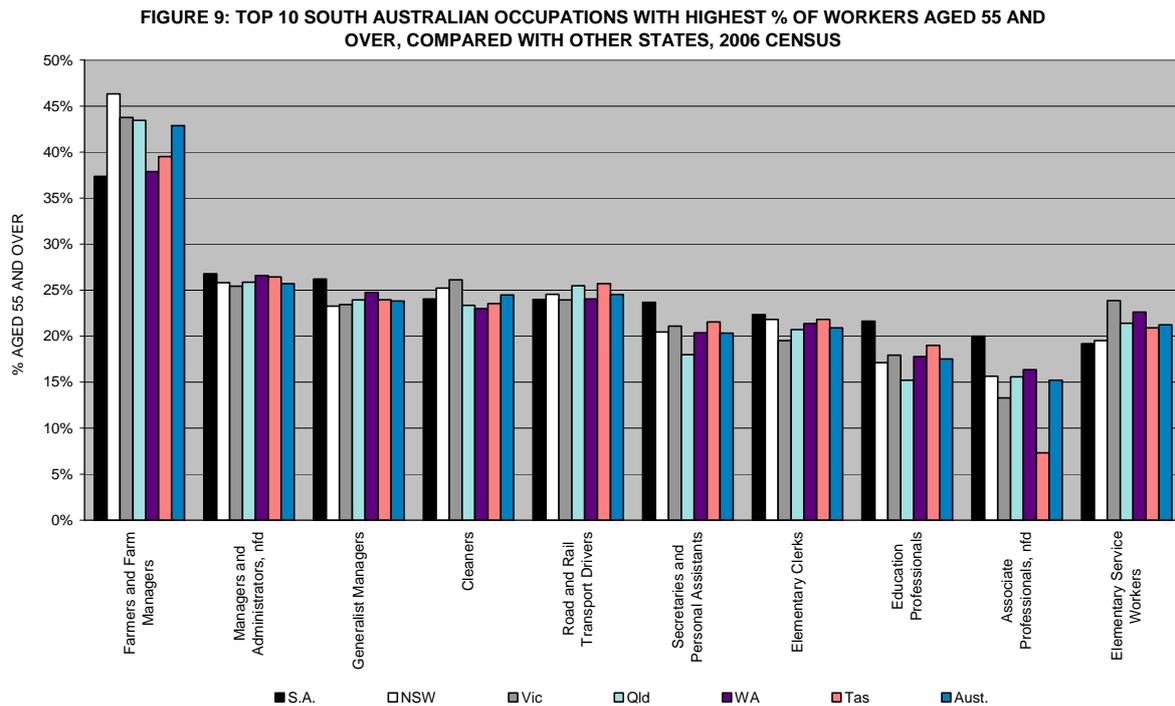


Source: ABS 2006 Census data

Viewed nationally, **Figure 9** shows the ten "oldest" occupations in South Australia (those with the greatest *proportion* of the workforce aged 55 and over), compared with other States. It can be seen

that South Australia has **six out of ten occupations** with a higher proportion of workers **over the age of 55** relative to Australia as a whole, and these are –

- o Secretaries and personal assistants
- o Elementary clerks
- o Education professionals
- o Associate professionals
- o Generalist managers
- o Managers and administrators nfd.



Source: ABS Census data

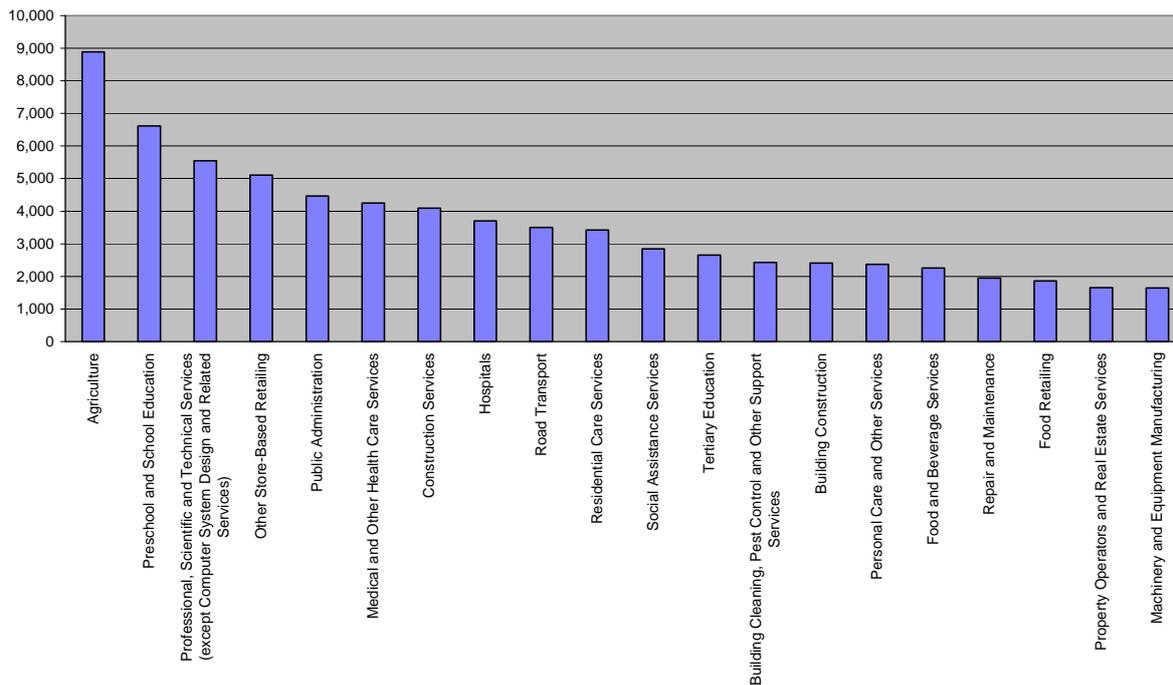
### 2.1.5 Industry-based ageing in the South Australian workforce

On an industry basis, the five industries with the highest **number** of employed people aged 55 and over in South Australia are, in order:

- o agriculture
- o pre-school and school education
- o professional scientific and technical services
- o other store based retailing
- o public administration.

This represents the industries in which the greatest numbers of people are likely to need to be replaced due to retirement over the next 10 years in South Australia, and those where a greater attention to ‘ageing-friendly’ occupational health and safety will be needed – *see Figure 10* which depicts the top 20 ‘oldest’ industries.

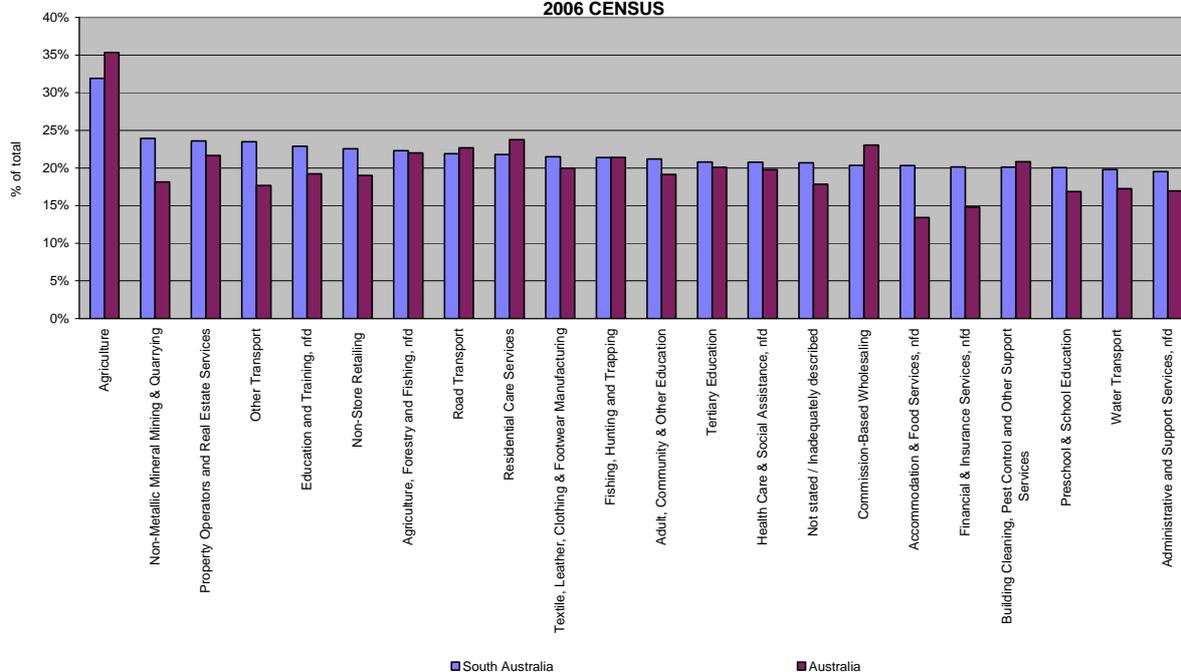
FIGURE 10: TOP 20 'OLDEST' INDUSTRIES, SOUTH AUSTRALIA, BY NUMBER, 2006 CENSUS



Source: ABS Census data

Figure 11 provides a comparison of South Australian industry-based ageing with national trends. It shows the 20 "oldest" industries in South Australia (ie those with the greatest percentage of their workforce aged 55 and over), as well as the equivalent percentage nationally.

FIGURE 11: EMPLOYED PERSONS AGED 55 AND OLDER - "OLDEST" INDUSTRIES, SA AND AUSTRALIA, 2006 CENSUS



Source: ABS Census data

It can be seen that South Australia has **15 out of 21 industries** with a higher proportion of workers **over the age of 55** relative to Australia as a whole, and these are (in order):

- o Non metallic mineral mining and quarrying
- o Property operating and real estate services
- o 'Other' transport
- o Education and training nfd
- o Non-store retailing
- o Agriculture forestry and fishing nfd
- o Textile, clothing and footwear manufacturing
- o Adult community and other education
- o Tertiary education
- o Health care and social assistance nfd
- o Accommodation and food services
- o Financial and insurance services nfd
- o Pre-school and school education
- o Water transport
- o Administrative and support services nfd.

The industry sectors with the **highest proportion of younger workers** are clustered around information technology activities, retailing, some manufacturing and defence.

The industries with the **highest number of male workers aged 55 and over** are –

- o Agriculture
- o Construction
- o Professional Scientific and Technical services
- o Road transport.

Those with the **highest number of women employees aged 55 and over** are –

- o Preschool and School Education
- o Hospitals
- o Residential Care Services (ABS: 2006).

## 2.2 Injury, illness and recovery rates of older South Australian workers

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### Research Question Addressed

- *What are the current rates of injury, illness and recovery of older workers in South Australia? In comparison to other age groups, are these rates higher, lower, or similar?*
- *In terms of workplace injury and illness, what do (research and) claims-related data tell us about the risk posed by different age groups? By different occupations? By different industries? What factors interrelate in relation to risk (eg age and occupation)?*

Understanding the structure and pattern of *WorkCover SA* claims is important in terms of assessing the risks that an ageing workforce may bring to future *WorkCover SA* liabilities. To this

end, this section is based on a statistical overview of relevant unit record data of all *WorkCover SA* claims during 2006 and 2007<sup>10</sup> and provides an age-based review of –

- o Distribution of claims
- o Incidence of claims
- o Frequency of claims
- o Duration of claims
- o Type of injury
- o Risk by size of employing organisation
- o Risk by industry
- o Risk by occupation.

**The analysis which follows needs to be understood in the context of an overall decline during the last decade in the number of claims.** Over the 8 year period to 2003-04, the total number of claims across all age groups nationally has declined from a total of 164,910 to 144,025. Preliminary figures for 2004-05 indicate that this downward trend has continued (ASCC: 2007).

While the number of claims has fallen in recent years, there has been a shift in the *distribution of claims* among different age groups. Reflecting Australia's ageing workforce, the distribution of claims has shifted towards the mature age groups – the proportion of claims for employees aged 45 and over increased from 32% in 1996-97 to 38% in 2003-04<sup>11</sup> (ASCC: 2007).

Similarly, the frequency and incidence of claims made to *WorkCover SA* have shown an overall decline – see [Tables 4 and 5](#).

### 2.2.1 Age-based distribution of claims

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Of the **70,743** *WorkCover SA* claims in 2006 and 2007, **9,091** or **12.9%** were for people aged **55 and over**. As [Figure 12](#) shows, the highest proportion of claims involves the **40 to 49** year age group, followed by those aged 35 to 39, and then by those aged 50-54, closely followed by those in the 20-24 year age group.

These proportions of claims need to be viewed in relation to the representation of different age groups within the South Australian workforce. [Table 4](#) compares the age structure of *WorkCover SA* claims with the age structure of the South Australian workforce in 2006. It shows that –

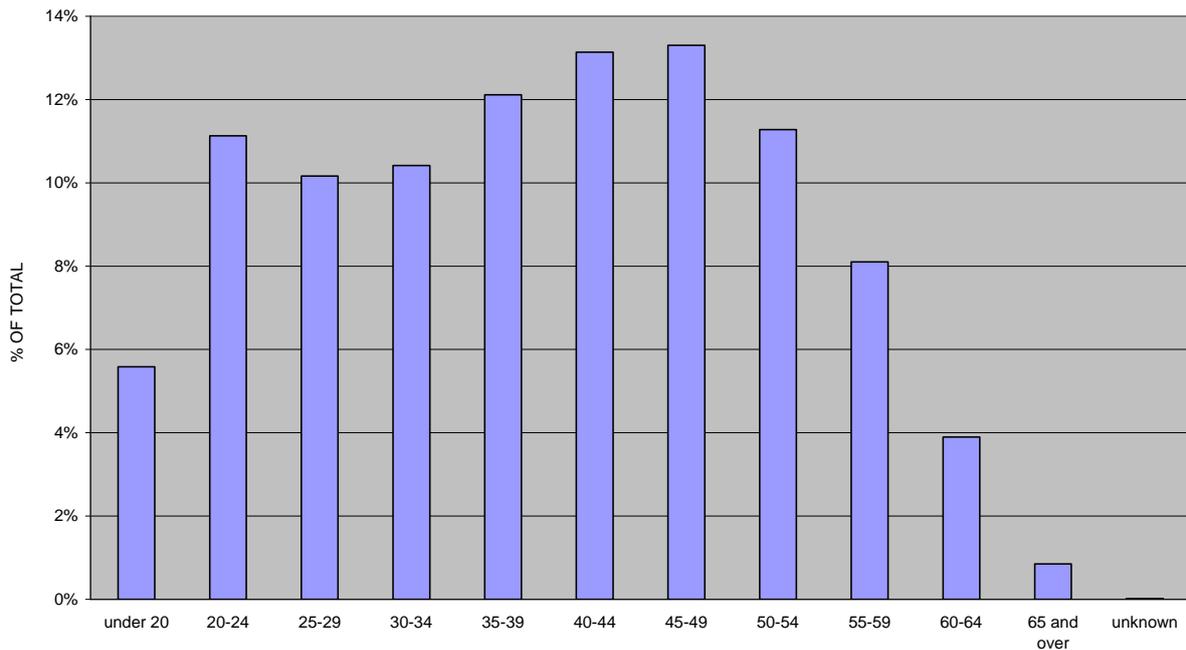
- o the percentage of claims for people aged 55 and over is **lower** than their workforce representation (12.9% of claims compared with 15.8% of the workforce).
- o For all age groups from 20 to 54 years, the share of *WorkCover SA* claims made is **greater** than their total employment share.

---

<sup>10</sup> These provide information about date of claim, date of injury, claim status, age, gender, occupation, industry, employer size, status of organisation (ie self-insured or *WorkCover*), nature of injury, body location of injury, agency of injury, mechanism of injury and length of active claim.

<sup>11</sup> Preliminary figures for 2004-05 show a further increase to 39%.

**FIGURE 12: AGE DISTRIBUTION OF WORKCOVER CLAIMANTS 2006 AND 2007**



Source: WorkCover data provided to AISR

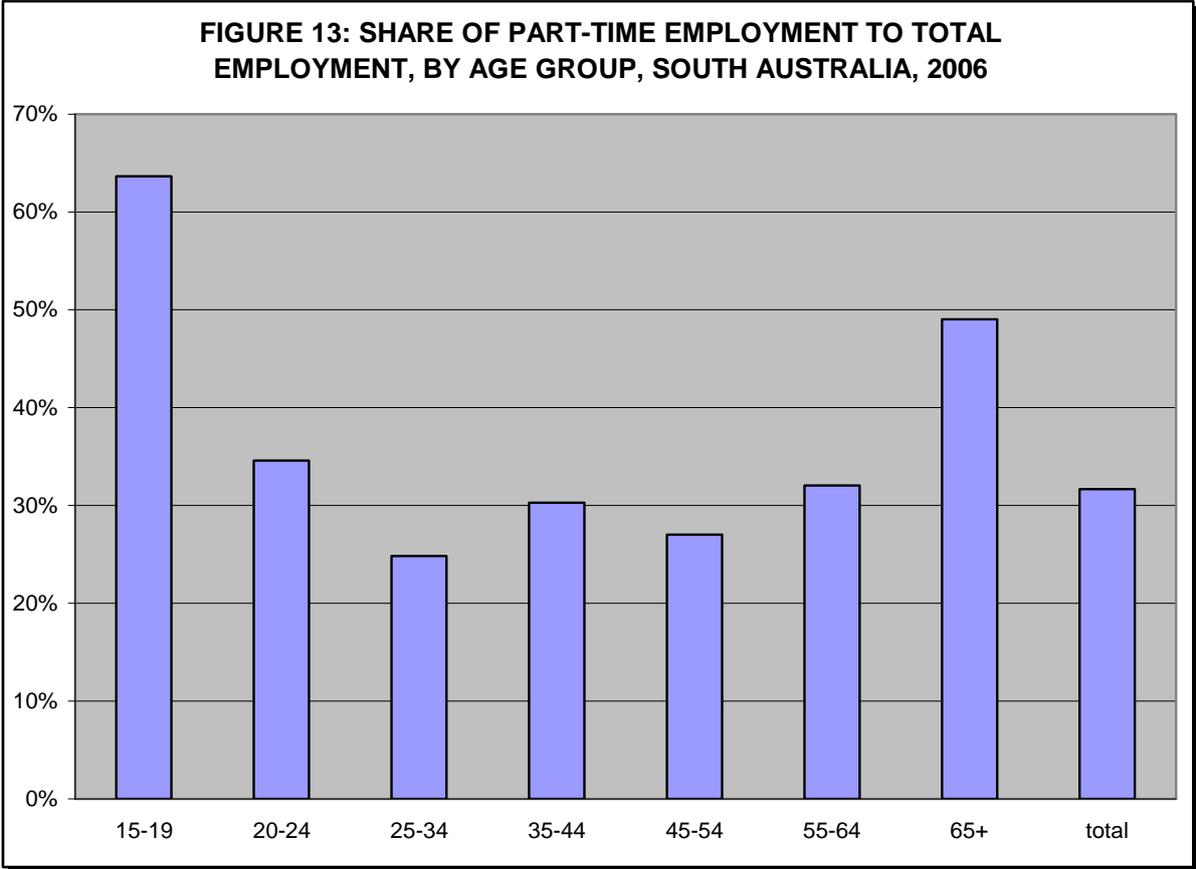
**Table 4: Age-based Distribution of Claims, 2006-2007**

Age of claimants	number	% of total	% of total employment
under 20	3,952	5.6	6.4
20-24	7,872	11.1	10.2
25-29	7,191	10.2	
30-34	7,370	10.4	
<i>Sub-total: 25-34</i>	<i>14,561</i>	<i>20.6</i>	<i>19.7</i>
35-39	8,568	12.1	
40-44	9,292	13.1	
<i>Sub-total: 35-44</i>	<i>17,860</i>	<i>25.2</i>	<i>23.9</i>
45-49	9,412	13.3	
50-54	7,980	11.3	
<i>Sub-total: 45-54</i>	<i>17,392</i>	<i>24.6</i>	<i>24.0</i>
55-59	5,733	8.1	
60-64	2,757	3.9	
<i>Sub-total: 55-64</i>	<i>8,490</i>	<i>12.0</i>	<i>13.5</i>
65 and over	601	0.8	2.3
Unknown	15	0.0	
<b>Total</b>	<b>70,743</b>	<b>100.0</b>	<b>100.0</b>

Source: WorkCover SA data provided to AISR, and ABS Census data

The under-representation of older workers in terms of claims may reflect the **number of hours worked** (see discussion later in [Section 2.2.4](#) on *frequency rates*). Older people tend to work fewer hours than their younger counterparts and therefore are less likely to get injured in the workplace. People aged 55 and over have the greatest share of part-time employment (as a

percentage of total employment) of all age groups with the exception of 15-24 year-olds (who are generally undertaking study) – see **Figure 13**.



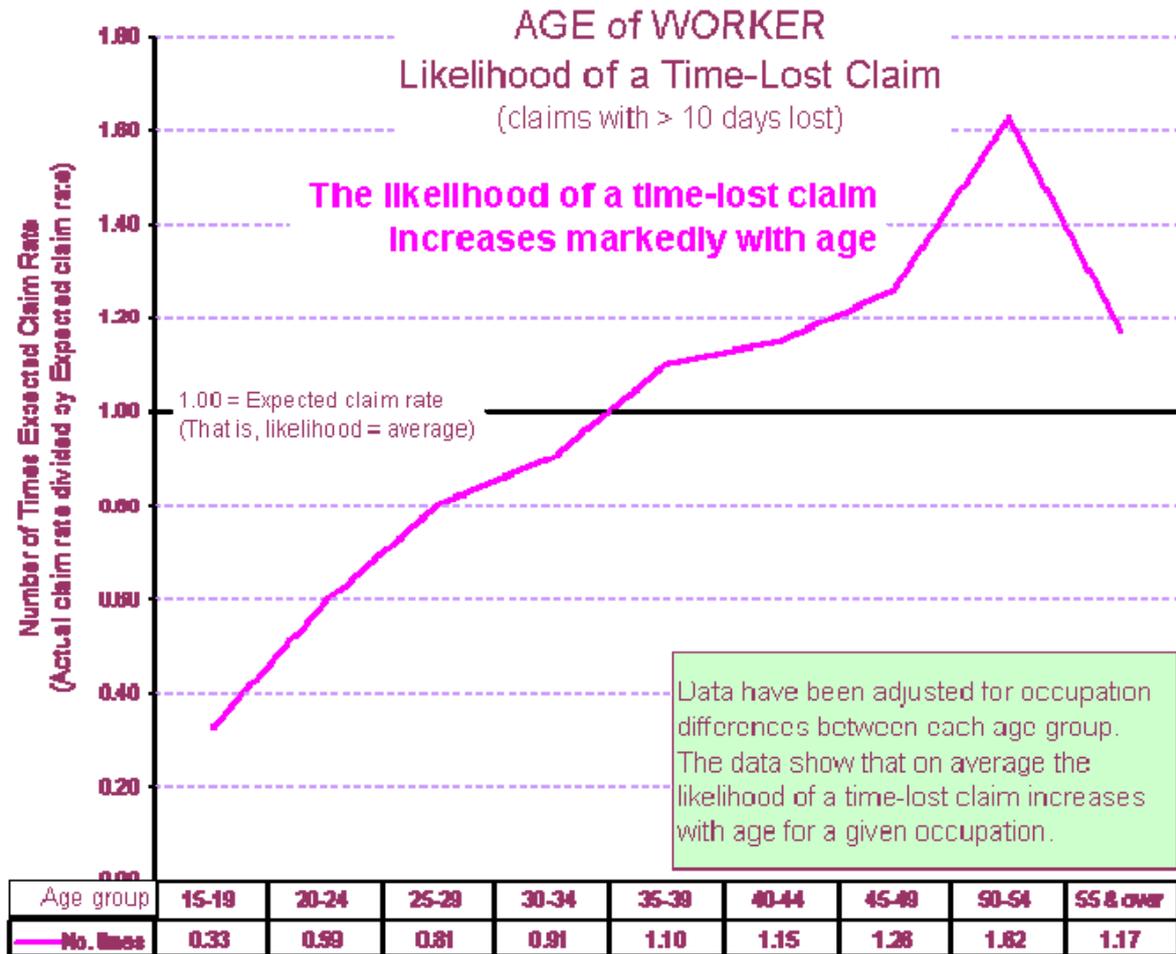
Source: ABS Census data

### 2.2.2 Duration of claims by age

**Figure 14** depicts claim rates involving the loss of 10 days or more by age groups. It indicates that the likelihood of a time-lost claim increases significantly with age, peaking at the **50 to 54 age group**.

Within the same occupation, older workers (particularly those aged 50-54) are more likely to have a claim than younger workers. This pattern becomes more pronounced for claims with greater than 10 days lost, as **Figure 14** illustrates.

Figure 14: Claims involving time lost from work, by age group



Source: Unpublished *WorkCover SA* (2001) analysis prepared for the *Safe Work Strategy*

### 2.2.3 Incidence of claims by age

The impact of age on *WorkCover* claims is complex, as there are a range of factors that interact with age, making it difficult to isolate the impact of age alone. The number of claims can also be affected by changes in the *size and composition* of the workforce. Therefore, to adjust for changes over time in the number of employees in each age group, a measure called the *incidence rate* has been developed. This measures *the number of compensated claims per 1,000 employees* and can be used to compare the relative likelihood of work-related injury or diseases at different ages and in different years.

**Table 5** depicts changes in the incidence rate over time, using national data. It can be seen that -

- o The overall incidence rate, across age groups, has declined from 1996-7 to 2003-04.
- o The incidence rate **increases with each age group** until 65 and over, when it declines sharply.
- o The age groups with the **highest** incidence are between **50 and 64 years**, and **particularly those aged 55-64 years**.
- o The **lowest** incidence occurred among the youngest age group, those **under 20 years**.

- o While older workers had the highest incidence rates, they also had the **largest rate of decline in incidence** rates over the period to 2003-04. For example, for 60-64 year-olds, there were 22.7 claims per 1,000 employed in 2003-04, down from 35.9 in 1996-97.

**Table 5: Incidence rate (claims per 1,000 employees), 1996-97 and 2003-04**

Age Group	1996-97	2003-04
15-19	13.2	9.6
20-24	19.3	13.8
25-29	20.7	14.8
30-34	22.9	16.7
35-39	23.3	18.1
40-44	23.2	19.1
45-49	24.5	19.4
50-54	26.7	20.6
55-59	31.7	22.1
60-64	35.9	22.7
65 and over	15.5	12.6
<b>Total Claims</b>	<b>22.6</b>	<b>17.2</b>

Source: Australian Safety and Compensation Council: 2007

Preliminary figures for 2004-05 show a further decline across all age groups, with a total incidence rate of **16.6 per 1,000 employees** (ASCC: 2007).

#### 2.2.4 Frequency of claims by age

Another approach to analysing the relationship between age and claims involves the *frequency rate* which measures the *number of claims per million hours worked*. This negates differences in the proportion of workers who are employed part-time and the changes in those proportions over time. More generally, it eliminates the effect that differences in average hours worked by age group have on claims by age group. As identified previously, some age groups (eg those aged 55 and over) have a noticeably greater share of part-time employment relative to other age groups.

**Table 6** shows changes in the frequency rate over time and by age group.

**Table 6: Frequency rate (claims per million hours worked), 1996-97 and 2003-04**

Age Group	1996-97	2003-04
15-19	12.6	9.7
20-24	11.8	8.9
25-29	11.5	8.4
30-34	12.9	9.6
35-39	13.2	10.5
40-44	12.8	10.9
45-49	13.5	11.0
50-54	14.7	11.7
55-59	18.4	13.0
60-64	22.2	14.6
65 and over	10.2	8.8
<b>Total Claims</b>	<b>13.2</b>	<b>10.4</b>

Source: Australian Safety and Compensation Council: 2007

While the incidence rate showed a steady increase with age, the increase in the frequency rate was more modest. It is evident from **Table 6** that –

- o the overall frequency rate, across all age groups, has declined between 1996-7 and 2003-04;
- o the frequency rate decreases from 15 to 29 years and then **increases with each age group from 35 years to 64 years**, then declines sharply with the 65 and over age groups;
- o the age groups with the **highest** frequency rates are between **55 and 64** (as occurred with incidence rates);
- o while older workers had the highest frequency rates, they also had the largest **rate of decline** in frequency rates. For example, for 60-64 year-olds, there were 14.6 claims per million hours worked in 2003-04, down from 22.2 in 1996-97.

Preliminary data for **2004-05** show a **further decline** in the overall frequency rate to **10** (ASCC: 2007).

### 2.2.5 Industry sector and age-based risk of claim

This section identifies those industry sectors which have higher levels of claims statistics. The share of total claims is then compared to the share of total employment by industry. With workforce ageing becoming more pronounced and with older people displaying greater relative incidence, frequency and time lost with respect to claims, some industry sectors are at greater risk than others in relation to ageing-related claims.

**Table 7** compares employment shares by industry with the shares of *WorkCover SA* claims by industry for South Australia during 2006 and 2007. It shows that *WorkCover SA* claims are overwhelmingly concentrated in the **community services** and **manufacturing** sectors (in both cases well above their share of total employment), followed by the **wholesale and retail trade** sector.

**Table 7: Employment share by industry and industry share of *WorkCover SA* Claims, 2005-06**

Industry	Share of total employment SA 2006 (%)	Share for those aged 55 and over (%)	Share of all <i>WorkCover</i> Claims 06 and 07 (%)	Share of all <i>WorkCover</i> Claims for 55 and over 06 and 07 (%)
Agriculture, Forestry & Fishing	4.7	8.8	3.1	3.7
Manufacturing	13.3	11.7	27.2	24.0
Construction	6.5	6.4	7.1	7.4
Wholesale and Retail Trade	19.2	14.4	15.2	11.5
Transport & Storage	3.8	4.8	5.4	6.3
Finance, Property & Business Services	12.5	12.5	3.9	4.2
Government Administration & Defence	5.4	5.2	3.0	3.0
Community Services*	20.6	23.9	27.5	31.3
Recreational, Personal & Other Services	5.6	5.4	5.1	5.1
Mining	8.4	7.0	1.5	1.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* includes health and education

Source: ABS 2006 Census data; and *WorkCover* data provided to AISR

Furthermore, the community services sector makes up almost one-third of all claims for workers over 55 years of age, well above its employment share. More than half of all claims made by people aged 55 and over are associated with employees in the community services and

manufacturing sectors. As discussed in [Section 2.1.5](#), both of these industries have significant proportions of workers aged 55 and over, and as such, suggest a greater risk of claims.

## 2.2.6 Occupation and age-based risk of claim

It is difficult to draw many inferences from occupational data reported by *WorkCover SA* with respect to its claims, due to the way the data are aggregated. However, [Table 8](#) provides total claims (both registered and self-insured) based on major occupational groups for 2006-07, as well as their equivalent employment share. It shows that the occupations with the highest share of claims were *labourers and related workers, tradespersons and intermediate production and transport workers* – all of whom have a share of total claims which far exceeds their share of total employment.

**Table 8: Total Claims (percentage of total) by Occupational Group 2006-07 and Share of Total Employment 2006, South Australia**

Occupational Group	% of total claims	% of total employment
Labourers and Related Workers	24.6	10.0
Tradespersons	21.0	12.0
Intermediate Production & Transport Workers	19.0	8.2
Intermediate Clerical, Sales & Service Workers	11.1	16.8
Associate Professionals	8.4	12.1
Professionals	7.8	18.0
Elementary Clerical, Sales & Service Workers	5.8	9.4
Managers & Administrators	1.6	9.2
Advanced Clerical & Service workers	0.5	2.8
Other & non-classified workers	0.3	1.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Source: ABS 2006 Census data; and *WorkCover* Statistical Review 2006-07

Analysis of *WorkCover SA* claims data on the basis of insurance status shows that occupations requiring significant physical input are associated with the greatest number of claims.

- o Among **registered** employers, the occupations with the largest number of claims are:
  - Heavy truck drivers and storepersons among males and
  - Personal care assistants and commercial cleaners among women.
- o For the **self-insured** sector, the occupations with the highest number of claims are:
  - Engineering production process workers, and storepersons for males and
  - Registered nurses and personal care assistants for females.

As discussed in [Section 2.1.4](#), the 'oldest' occupations in South Australia (Intermediate clerical workers, Farmers and farm managers, Education professionals, Intermediate service workers) tend *not* to be the occupations with the greatest number of claims. Claims are highest in manual occupations in which many employees have left the labour force by the time they are 55. However, given continued health advances and increasing participation among older workers across all sectors, the potential exists for higher labour force participation by mature age workers from these occupations. Workplaces will require significant change to accommodate these workers in a safe and productive environment, and *Chapter 4* provides examples of how some organisations have addressed this challenge.

## 2.3 Conclusions

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The key findings from this section are as follows:

- o Older people comprise an increasing share of the employed workforce and this trend can be expected to continue for some time as the Baby Boomer cohort reaches retirement age, and a range of economic, social and policy changes encourage them to delay their retirement.
- o The proportion of the workforce with a disability (whether acquired from the workplace or not) will **increase** over the next decade due to population ageing, the prolonged lifespan of people born with a disability, and the increasing availability of employment for under-employed people with a disability in response to significant skills shortages. **Acquired** disability becomes progressively more concentrated in **older age** groups and therefore the percentage of the workforce with a disability is likely to continue to increase over coming years.
- o Ageing is not uniform across industry sectors and occupational groups, with concentrations varying significantly.
  - ⇒ The industries with the highest proportion of workers aged 55 and over in South Australia are **agriculture, health care, education, public administration** and parts of retailing, construction and manufacturing.
  - ⇒ The occupations with the oldest profile are **farmers and farm managers, managers and administrators and generalist managers**.
- o *WorkCover SA* claims do not necessarily correspond with the age profiles of industries and occupations.
  - ⇒ Claims are overwhelmingly concentrated in the **community services** and **manufacturing** sectors, in both cases, well above their workforce representation, followed by the wholesale and retail trade sector.
  - ⇒ Occupations with the highest share of claims were **labourers and related workers, tradespersons and intermediate production, and transport workers** - all of whom have a share of total claims which far exceeds their share of total employment. Claims are highest in **manual** occupations and it is likely that older workers in these occupations have left the labour force or moved to less physically demanding work roles.
- o In common with national trends, there has been a **decline in the number of WorkCover SA claims**, and in the incidence rate **across all age groups**, with the **largest rate of decline** in incidence rates involving workers aged **60 to 64**.
- o While the total number of claims is falling, the **distribution of claims has shifted towards older age groups**. This is consistent with the observed ageing of the workforce. With the ageing of the workforce expected to accelerate over the coming decade, the share of claims among older workers is likely to increase.
  - ⇒ The **highest proportion of claims**, on an age basis, involves the **40 to 49 year** age groups, followed by 35 to 39 year olds, and then by those aged 50 to 54.
  - ⇒ For all age groups between **20 and 54**, the share of *WorkCover SA* claims is **greater** than their workforce representation.

- ⇒ Those aged **55 and over** have a **lower** proportion of claims relative to their share of employment, and this is likely to reflect that they have the greatest share of part-time employment compared with all groups aged from 24 and over.
- o In order to better understand the implications of workforce ageing on *WorkCover SA* liabilities it is important to analyse claims on the basis of their *duration*, *incidence* (that is, number of compensated claims per 1,000 employees) and *frequency* (that is, the number of claims per million hours worked by age group).
  - ⇒ A within-occupation analysis of claim rates involving the loss of ten days or more indicates that the likelihood of a time-lost claim increases significantly with age, peaking at the **50 to 54 year** age group.
  - ⇒ The incidence rate of claims has declined over time, across age groups, with the largest rate of decline involving 60-64 year olds. However, the incidence rate increases significantly with age and those with the highest incidence are aged between 50 and 65 years, particularly those aged **55-64 years**.
  - ⇒ Frequency rates have also declined for each age group over the past decade. Frequency rates also increase with age, but not to the extent of incidence rates. As with incidence rates, the age group with the highest frequency rates are those between **55 and 64 years**.

The likelihood of liability arising from workplace illness or injury cannot easily be determined on the basis of chronological age. Age is one variable that is mediated by a range of workplace factors, by the individual health and fitness of workers, and the interactive effect between individual worker and their work environment. These issues are discussed in *Chapter 3* which follows.

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**APPENDIX 1: NUMBER OF PEOPLE EMPLOYED AGED 55 AND OVER, 2006 CENSUS,  
SOUTH AUSTRALIA AND AUSTRALIA, 2 DIGIT OCCUPATION**

	<b>South Australia</b>	<b>Australia</b>
Intermediate Clerical Workers	8,165	109,891
Farmers and Farm Managers	7,484	75,074
Education Professionals	6,383	70,162
Intermediate Service Workers	5,378	63,738
Business & Administration Associate Professionals	4,936	61,608
Managing Supervisors (Sales and Service)	4,763	63,846
Health Professionals	4,641	57,411
Road and Rail Transport Drivers	4,436	63,742
Specialist Managers	4,403	57,044
Elementary Sales Workers	4,365	59,256
Other Labourers and Related Workers	4,302	50,442
Business and Information Professionals	4,083	55,535
Social, Arts and Miscellaneous Professionals	3,955	49,989
Cleaners	3,682	43,772
Generalist Managers	3,588	45,080
Construction Tradespersons	2,574	33,665
Secretaries and Personal Assistants	2,200	28,169
Factory Labourers	1,981	21,196
Other Tradespersons and Related Workers	1,893	22,031
Other Advanced Clerical and Service Workers	1,824	24,269
Mechanical & Fabrication Engineering Tradespersons	1,806	24,199
Other Intermediate Production Transport Workers	1,805	24,969
Science, Building and Engineering Professionals	1,742	25,860
Intermediate Sales and Related Workers	1,711	22,804
Intermediate Plant Operators	1,626	22,109
Science, Engineering & Related Assoc Professionals	1,555	18,897
Elementary Service Workers	1,522	24,609
Electrical and Electronics Tradespersons	1,432	17,305
Elementary Clerks	1,213	14,697
&& Not stated	1,174	15,815
Inadequately described	1,174	17,646
Automotive Tradespersons	1,132	12,874
Skilled Agricultural and Horticultural Workers	1,090	12,301
Food Tradespersons	1,009	11,560
Other Associate Professionals	836	8,685
Health and Welfare Associate Professionals	809	7,999
Managers and Administrators, nfd	808	12,874
Intermediate Machine Operators	734	11,516
Tradespersons and Related Workers, nfd	188	2,172
Professionals, nfd	185	2,388
Labourers and Related Workers, nfd	182	2,679
Intermediate Production and Transport Workers, nfd	134	1,682
Associate Professionals, nfd	53	450
Intermediate Clerical, Sales and Service Workers, nfd	47	251
Elementary Clerical, Sales and Service Workers, nfd	16	214
<b>Total Occupations</b>	<b>109,019</b>	<b>1,372,475</b>