

# Ageing Workforce

Protecting Tomorrow's Human Resources Today



# Introduction

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- ▶ **Tony Ingram**
    - ▶ Overview, issues and myths
  - ▶ **Susan Fields**
    - ▶ OH&S aspects, impacts and management
  - ▶ **Leanne Parker**
    - ▶ Human resource management strategies
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# Overview

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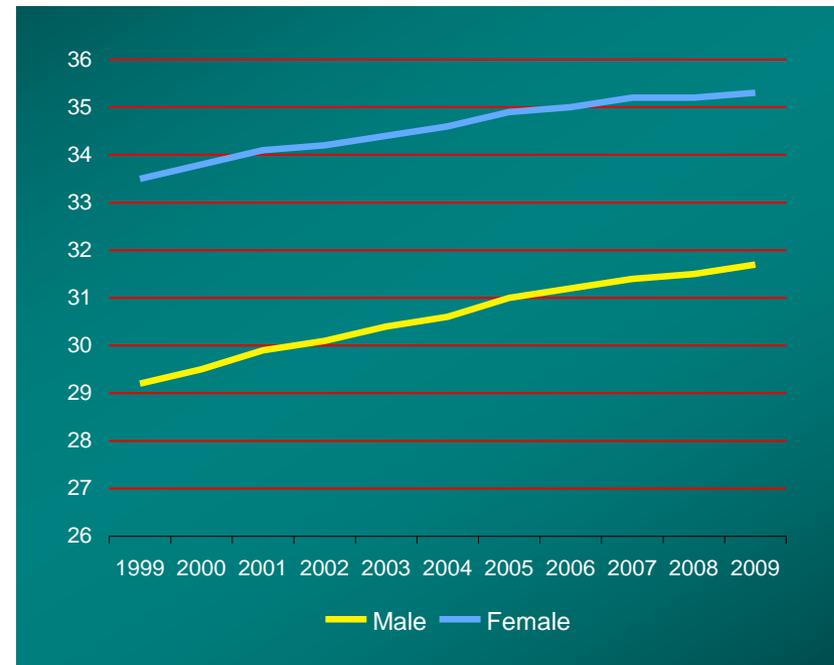
- ▶ Over the next several decades, population ageing is projected to have significant implications for Australia, including for the availability of workforce labour and skills
  - ▶ This may be accentuated in the aggregates industry
  - ▶ **The Ageing Workforce**
    - ▶ What is the ageing workforce?
    - ▶ What are the issues?
    - ▶ What are the truths?
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# Ageing population

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- ▶ Australia's population, like that of most developed countries, is ageing as a result of sustained low fertility and increasing life expectancy

Life Expectancy  
at age 50



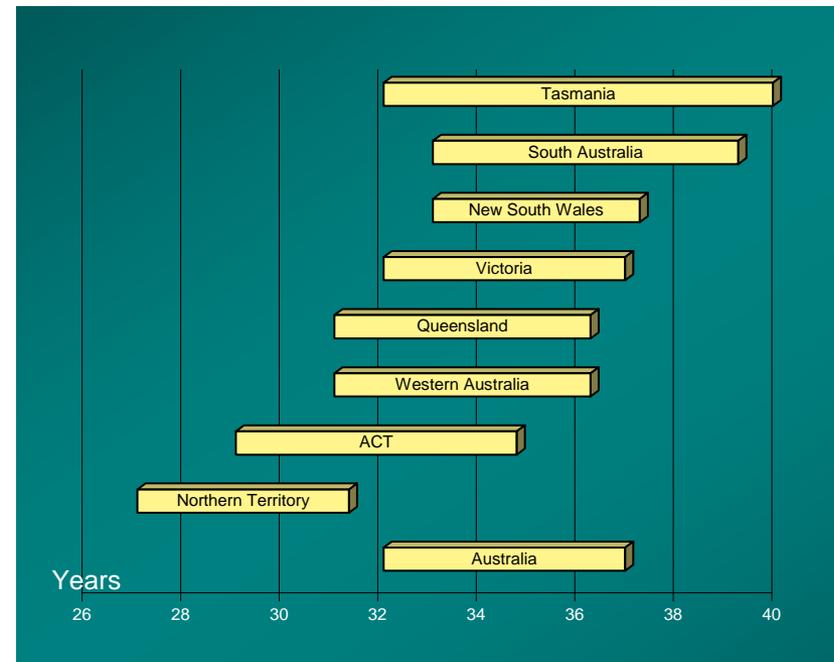
Source: Australian Bureau of Statistics

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# Ageing population

- ▶ Australia's population, like that of most developed countries, is ageing as a result of sustained low fertility and increasing life expectancy
- ▶ The median age of the population increased by 4.8 years over the last two decades, from 32.1 years to 36.9 years
- ▶ This is resulting in proportionally fewer workers in the 15 to 45 age group

Median Age of Population\*  
1990 to 2010



Source: Australian Bureau of Statistics

\* the age at which half the population is older and half is younger

# Understanding the ageing population

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- ▶ We all share the fact that we are getting older but with different functional ages
  - ▶ Older people can be victims of outdated attitudes, stereotyping, unfair policies and prejudices
  - ▶ These same attitudes and policies ultimately work against industry
  - ▶ Chronological age generalisations may be part of the problem because they can be unfair and they retard addressing the problem
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# The ageing workforce?

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- ▶ A greater risk of injuries?
  - ▶ A greater exposure to workers' compensation claims?
  - ▶ An inflexible workforce and a barrier to change?
  - ▶ A looming labour shortage?
  - ▶ A looming skills shortage?
  - ▶ A cause of under-performance?
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- ▶ After all, all we want is enough bums on seats and a safe, productive and flexible workforce
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# Definition of an 'older worker'

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- ▶ No universal agreement on this
    - ▶ Some reports 45 or 45 years
    - ▶ Some 50 or 55
    - ▶ Some pre-retirement 60 and retirement 65
  - ▶ 45+ years used by UN and WHO
  - ▶ ABS classifies people aged 45+ as 'older jobseekers'
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# Ageing workforce and labour shortage

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- ▶ Labour force participation rates fall sharply after age 54 years
- ▶ Unless older workers are able to and want to stay on in the workforce force, labour and skills shortages could occur

Workforce Participation  
NSW 2008



Source: Australian Bureau of Statistics

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# Aggregates industry workforce profile

- ▶ Mostly small sites (<10)
- ▶ Average age ~45
- ▶ Full-time permanent
- ▶ Periodic contractors
- ▶ Male
- ▶ Operators (2/3)
- ▶ Competes with preferred jobs
- ▶ Competes with mining
- ▶ Low female participation
- ▶ Few flexible working arrangements

## Occupational Groups Australia 2010

Occupation	Males		Females	
	15-54 years %	55 years and over %	15-54 years %	55 years and over %
Managers	14.7	22.9	9.6	12.3
Professionals	18.7	20.3	24.4	24.9
Technicians and Trades	24.0	18.3	4.6	3.3
Community Service Workers	5.5	3.7	14.3	12.0
Clerical and Administrative	6.7	6.8	24.3	28.0
Sales	6.9	4.9	13.8	8.1
Labourers	13.1	10.9	8.0	9.7
Machinery operators and drivers	10.4	12.2	1.1	1.7
<b>Total (000's)</b>	<b>4902</b>	<b>1036</b>	<b>4198</b>	<b>754</b>

Source: Australian Bureau of Statistics

# Myths and Realities

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- ▶ Unable to learn new things or skills
  - ▶ Age does not determine willingness to learn
  - ▶ Have failing memories
  - ▶ Long-term memory continues to increase with age
  - ▶ Aren't worth training, they are likely to leave or are just coasting
  - ▶ Older workers tend to be loyal and less likely to change jobs frequently
  - ▶ Less productive
  - ▶ Better job and machine design reduces the dependence on capability
  - ▶ Inflexible
  - ▶ Older workers may be cautious and that can improve accuracy and safety
  - ▶ Have impaired mental or intellectual capacity
  - ▶ Studies show intellectual ability stays intact into the 70's and beyond
  - ▶ More likely to suffer illness and are often absent or late
  - ▶ Generally, older workers have lower absenteeism and are more punctual
  - ▶ Have less education
  - ▶ Educational limitations is less a factor now
  - ▶ More likely to have work-related injuries
  - ▶ Older workers suffer fewer work-related injuries
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Our bodies do alter as we age .....



# OHS – aspects, impacts & management

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“Old age ain’t for sissies.”

*Bette Davis*

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# Risk management approach defines response

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- ▶ Is there is a problem?
    - ▶ Site by site, area, sector, company wide?
      - ▶ age profile of current workforce
      - ▶ future needs of business
  - ▶ How complex and urgent is the problem?
    - ▶ Age profile you have identified
      - ▶ scope and depth
    - ▶ Location of “problem” pockets
      - ▶ factors include single or multiple sites, urban / rural / isolated setting
    - ▶ Availability of replacement workers
      - ▶ influences include local demographics, ongoing access to education resources, proximity of other employment opportunities
    - ▶ Self assessment of “work ability” by current ageing employees
      - ▶ assists in identification and status of health issues that will impact on ability to carry out work and indicates type and urgency of issues to be addressed
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# OHS – aspects, impacts & management

Physical / Mental Aspects	Ageing Impacts	Workplace Impacts	Management Solutions
Sensory - vision	<p>↓ reduced acuity</p> <p>↑ vulnerability to extremes of lighting levels</p>	<p>Ability to “see” and adjust for indicators of risk e.g. obstacles, ground surface, control panel detail</p>	<p>Minimise glare</p> <p>Optimal lighting for task</p> <p>Non slip and even surfaces</p> <p>Prevent / clean up spillage</p>
Sensory - hearing	<p>↓ reduced ability to “hear” higher frequency</p> <p>↓ reduced ability to separate background and primary noise</p>	<p>Ability to “hear” and adjust for risk e.g. changed rhythm of equipment</p> <p>Reduced comprehension of spoken instructions</p>	<p>Reduce noise levels – plant, equipment</p> <p>Locate tasks and activities to less noisy areas e.g. tool box talks/ shift handover moved from workshop to crib room</p>

# OHS – aspects, impacts & management

Physical / Mental Aspects	Ageing Impacts	Workplace Impacts	Management Solutions
Musculo-skeletal	<p>↓ flexibility, elasticity</p> <p>↓ strength (e.g. 10% by 40, 25% by 65)</p> <p>↑ cumulative strain</p>	<p>Capacity to perform range of movements</p> <p>Capacity to undertake “heavy” work</p> <p>Capacity for recovery</p> <p>Increased risk of fatigue</p>	<p>Task manual handling risk assessments – emphasis on posture, frequency, weight</p> <p>General physical fitness and education – core strength, resistance, weight training, manual handling in the home</p> <p>Treatment for existing injuries – mobilisation, pain management</p>

# OHS – aspects, impacts & management

Physical / Mental Aspects	Ageing Impacts	Workplace Impacts	Management Solutions
Aerobic / cardio	<ul style="list-style-type: none"><li>↓ circulation</li><li>↓ ability to efficiently adjust to heat, cold</li><li>↓ ability to accommodate vibration</li></ul>	<p>Ability to do heavy work at speed</p> <p>Working in high / low temperatures</p> <p>Risk of fatigue</p> <p>Risk of musculo skeletal injury</p>	<p>Minimise vibration in plant</p> <p>Job rotation – reduce exposure to vibration, extreme temperatures, heavier work</p> <p>Self paced work – opportunity for breaks</p> <p>Even paced work – less fluctuations</p> <p>Minimise shift work</p> <p>Reduce initial performance requirements post leave</p>

# OHS – aspects, impacts & management

Physical / Mental Aspects	Ageing Impacts	Workplace Impacts	Management Solutions
Cognitive ability	<p>↓ speed in processing new information</p> <p>↑ application of skills and experience</p> <p>↔ ability to learn</p>	<p>Capacity to undertake new, complex work</p> <p>Capacity to perform under pressure</p> <p>Ability to be instantly adaptive</p> <p>Risk of fatigue</p>	<p>Overall reduction in risks in the workplace</p> <p>Task based fatigue risk assessment – emphasis on hours of work, flexible risk breaks</p> <p>Simple instructions when circumstances change</p> <p>Reduce initial performance requirements during learning periods</p> <p>Take advantage of accumulated skills and knowledge in task allocation</p>

# OHS – aspects, impacts & management

Physical / Mental Aspects	Ageing Impacts	Workplace Impacts	Management Solutions
General Fitness	<p>Any / all of the above! Other systemic diseases e.g. diabetes, obesity</p>  A photograph of a middle-aged man with grey hair, wearing a blue polo shirt, sitting at a table in a restaurant. He is eating a very large burger with a bite taken out of it. A plate of french fries is next to the burger. The background shows a restaurant interior with other patrons and tables.	Any / all of the above!	<p>General health awareness education – early intervention (should start before 45) Health and safety at home – e.g. MH in the home Motivational schemes recognising outcomes in health improvement – rewards commensurate with further health improvement</p>

# And as hardware, software, people .....

Workplace	Work / task organisation	People
<p>Non slip, even surfaces</p> <p>Lighting</p> <p>Spillage prevention</p> <p>Reduce noise levels</p> <p>Housekeeping – layout, storage</p> <p>Engineering controls – reduce manual handling risk (particularly need for repetitive tasks)</p> <p>Minimise vibration-mobile plant, equipment</p>	<p>Conduct information, shift handover sessions outside noisy environments</p> <p>Job rotation</p> <p>Adapt tasks to minimise necessity for “quick” decision making</p> <p>Utilise and recognise value of experienced decision making</p> <p>Simple, well structured work instructions</p> <p>Self paced work – opportunity for breaks, movement</p> <p>Even paced work</p> <p>Minimise shift work</p> <p>Reduce initial post holiday / leave performance requirements</p> <p>Minimise shift work</p> <p>Utilize an individuals skills, experience in task allocation</p>	<p>Training – small, frequent, chunked</p> <p>Reduce performance requirements during learning period</p> <p>General health awareness education – early intervention</p> <p>Incentive schemes for participation and outcomes in health improvement – rewards commensurate with health programs</p> <p>Health and safety at home</p> <p>Treatment – existing injuries – pain management, mobilisation</p>

# Just a snapshot of available resources ....

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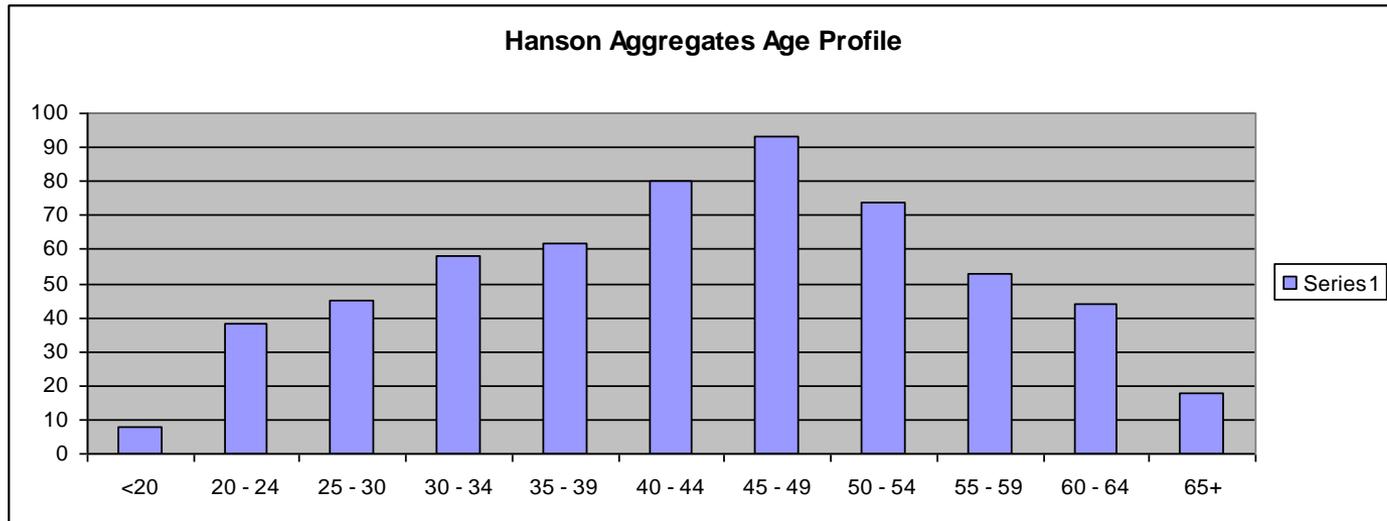
- ▶ **MSAC (NSW) Guidance material**
    - ▶ Managing musculo-skeletal disorders
    - ▶ Health Management Plan
    - ▶ Fatigue Management Plan
  - ▶ **Publications (mining industry focus)**
    - ▶ Practical Ergonomics
    - ▶ Bad Vibrations
  - ▶ **IQA and other professional bodies**
    - ▶ Workshops, seminars, other education opportunities
  - ▶ **Industry Assistance Units associated with regulators**
  - ▶ **National and international research**
    - ▶ Bibliography available
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# Aging Workforce HR Strategy

# Current issues

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- ▶ 115/573 (20%) of Hanson's Quarry employees in Australia are now eligible to retire.
  - ▶ They will walk out with all their knowledge of how to fix things with a shifting spanner and fence wire!
  - ▶ There aren't enough younger workers to replace them immediately
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# Strategies to encourage prolonging retirement

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- ▶ **Assisting with financial planning**
    - ▶ Most quarry employees only commenced retirement saving when compulsory employer superannuation contributions payments started.
    - ▶ Some older quarry employees are now supporting a 3<sup>rd</sup> generation at home
  - ▶ **Allow flexible work arrangements**
  - ▶ **Support and encourage older workers to coach new employees (Offsiders)**
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# Financial Planning Support

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- ▶ Encourage and support financial counselling in conjunction with your Superannuation provider or theirs.
  - ▶ Any employees over 65 are entitled to
    - ▶ *Senior Australians Tax Offset Allowance* (higher tax free threshold if they earn under a certain amount [www.ato.gov.au](http://www.ato.gov.au))
    - ▶ Centrelink Work Bonus. (Incentive age pensioners to remain in the workforce. You are now able keep more of your income, or work for short periods with little or no affect on your pension. [www.centrelink.gov.au](http://www.centrelink.gov.au))
  - ▶ Allow salary deductions to maximise tax benefits
    - ▶ ie transition to retirement
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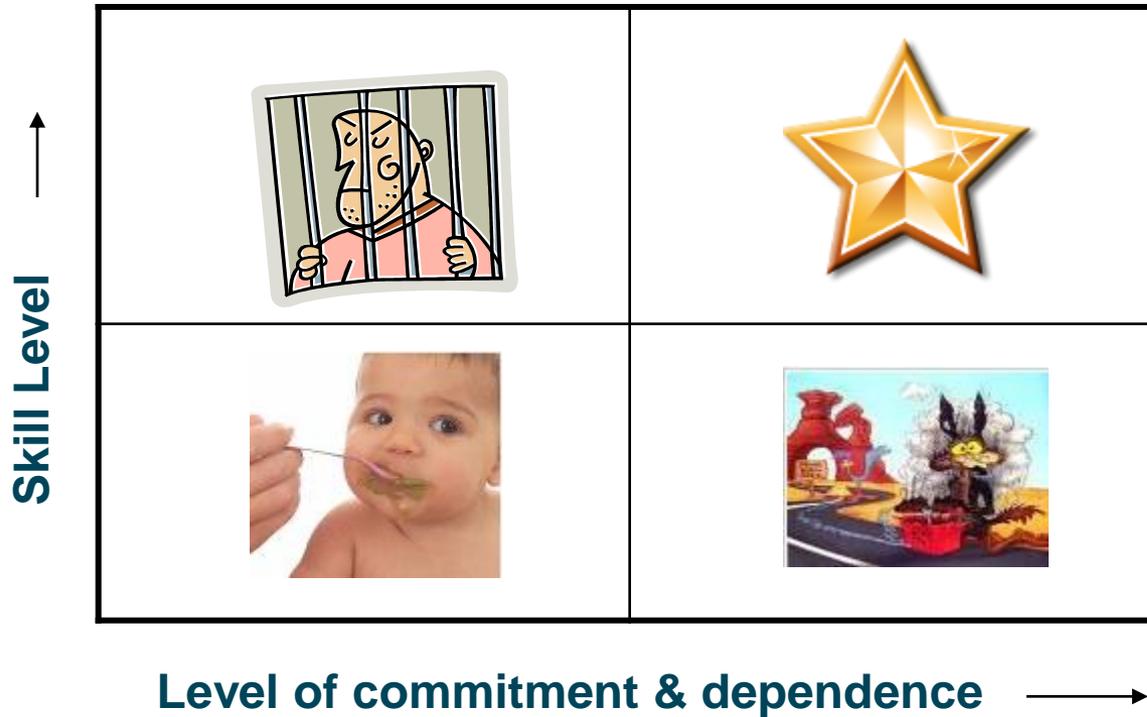
# Flexible Work Arrangements

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- ▶ Job Sharing – The assets are fully utilised the older employee isn't doing overtime.
  - ▶ Reduced overtime offsets additional part time employee on-costs.
  - ▶ Permanent Part time or Casual employment for high work periods and still get aged pension benefits.
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# Mature employees make great coaches

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The Parker Model 2011

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# Mature workers

- ▶ less supervision required
- ▶ look after equipment
- ▶ multi-skilled
- ▶ patient
- ▶ loyal
- ▶ more realistic wage expectations



# Summary

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- ▶ Population ageing is occurring due to a sustained decline in fertility and mortality
- ▶ Over the next several decades, this may result in a shortage of labour and skills
- ▶ To maximise future productivity, we need to increase the productive working life
- ▶ This requires a mix of solutions and a changed approach to workplace and workforce planning and development

