



Australian Government

# A U S T R A L I A N A P P R E N T I C E S H I P S

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## Mapping out careers

### Department of Lands, Spatial Information Sourcing, Bathurst

Western New South Wales region



The New South Wales Department of Lands Spatial Information Sourcing Branch (SIS), Bathurst, is at the forefront of technology changes in Geographic Information Systems (GIS).

Staff at the Bathurst office collect and analyse geographical data including surveys, aerial photography, addresses, and cadastre and property information. This vital infrastructure data is used by governments, utility organisations and the private sector for planning, valuation, property development and emergency services.

‘The late 1980s saw an acceleration of the technology age for GIS, but the changes have been most dramatic for us in the last 10 years,’ says Bill Miller, Team Leader and Trainee Coordinator at SIS.

But the biggest change is yet to come—a generational shift in workers which will see about 40 per cent of SIS staff retire by 2013. To prepare for that shift, the first group of 10 SIS Australian Apprentices began in Bathurst in 2008.

‘The work is highly technical and requires well-developed computer skills and trainees are put through a two year accelerated learning program,’ Bill says.

‘They need to be skilled in computer applications, proficient at mathematics and geometry and have an appreciation of the spatial connection between the environment and the geographic information databases that record this valuable information.’

Bill says that the Australian Apprenticeships in spatial information have attracted people from school age through to their mid-twenties.

‘The age grouping has an advantage in that they bring work experience and life skills from working in other organisations,’ he says. ‘Some have worked in manufacturing, clerical, hospitality, and transport; however they see SIS as an opportunity to develop a secure career. So when you throw them all together into a team, there’s a great mix of skills.’

The Australian Apprenticeship takes two years, during which time Australian Apprentices complete a Certificate IV in Spatial Information. Due to the department’s regional location, TAFE lectures are delivered on line by Sydney Ultimo TAFE each week.

Bill says that there can be some challenges with online study.

‘Some of the maths can be hard to explain online—if that happens we organise one of our in-house experts to provide additional tuition,’ Bill says.

But there are also benefits to the online study. Staff from local government in the area have been invited to complete the same course, and they join SIS in practical training days and additional tuition where required.

'We've used that connection to develop a project between the Australian Apprentices and two local governments in the region. We have our Australian Apprentices working with local council people to upgrade cadastral and mapping datasets to the benefit of both organisations,' Bill says.

'I've found that projects like these will extend their knowledge beyond the computer based GIS environment which gives them greater organisational knowledge and improved industry awareness.'

It's about personal development as well as development for the workforce.

'It's really about giving them all those skills so that when they apply for a permanent job, they are confident and competitive. Three Australian Apprentices have gained permanent jobs with us in the first 12 months. So we're seeing some real results—as well as facilitating the development of energetic young people.'

