



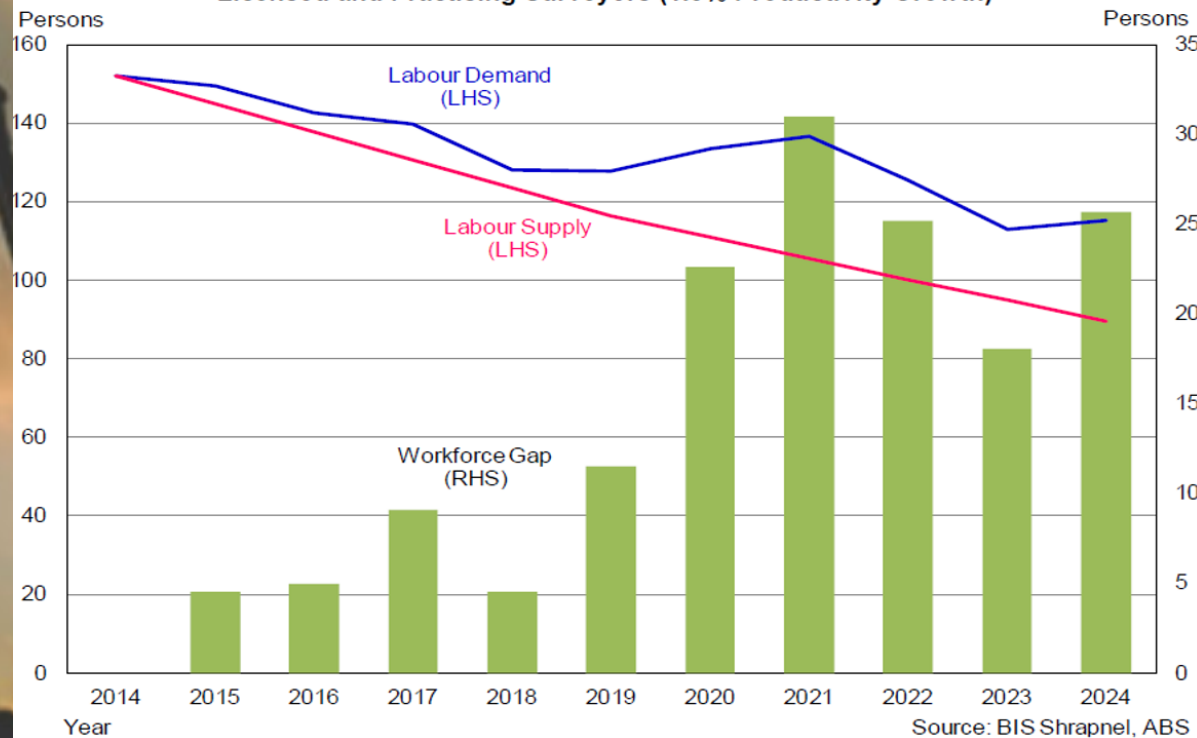
Shared core curriculum for national Licensed Surveyor qualification

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Licensed and Practising Surveyors (1.5% Productivity Growth)



"I've really enjoyed learning new things about how these companies function and what it's like to be involved in the planning and development of properties..."

Max, Work Experience Student

WORK EXPERIENCE IN SURVEYING



A Life Without Limits
Work Experience in Surveying



A Life Without Limits
Studying Surveying



A Life without Limits
Working In Surveying

WHAT is geospatial science?

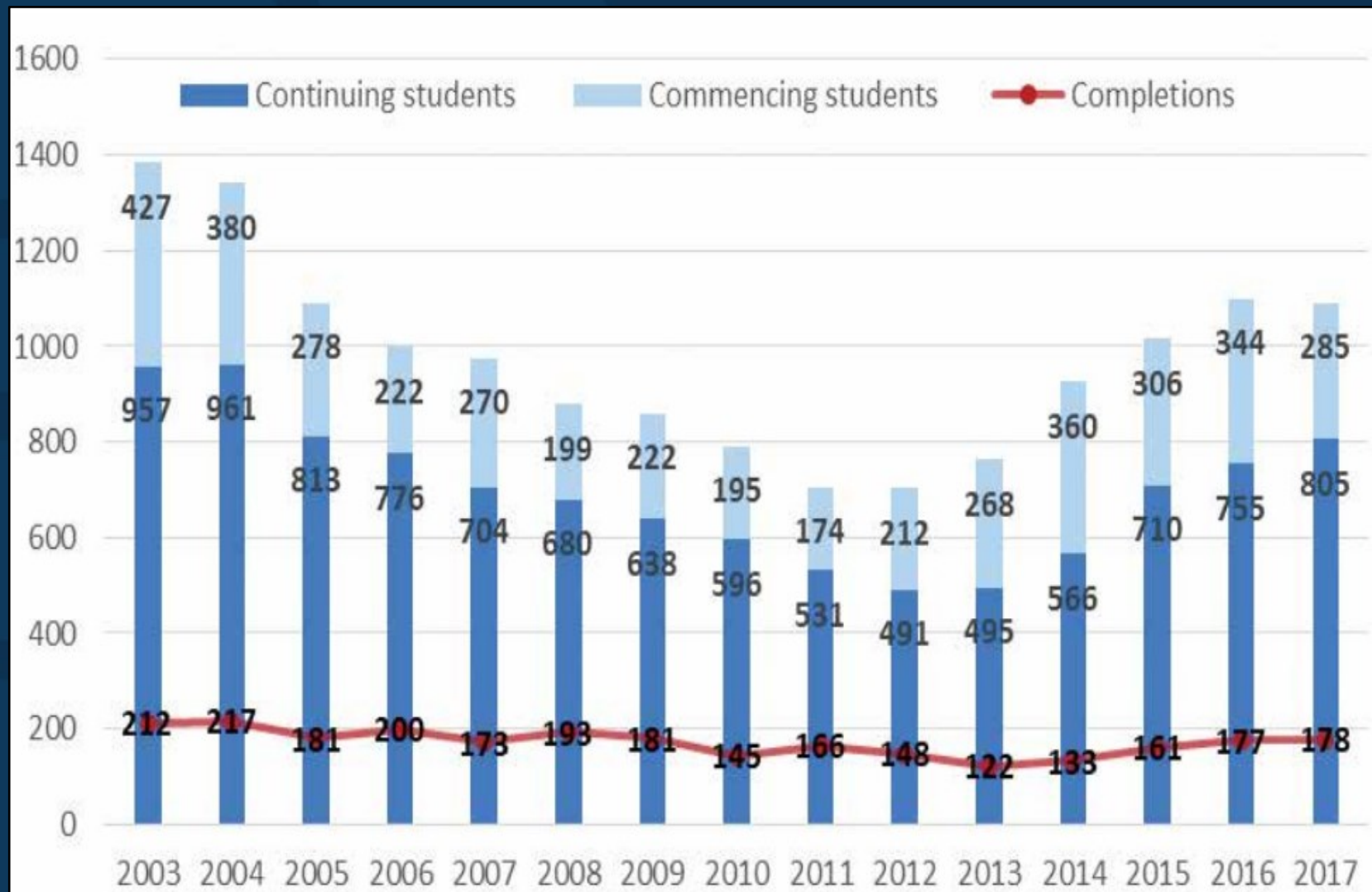
Geospatial science is one of the most important fields of study you've never heard of. In a nutshell, geospatial scientists collect, analyse and model data based on a particular location, then use creative ways to map or represent the data simply and meaningfully.

They build a deeper understanding of this data, including how it relates to the surrounding environment and the ways it changes over time. What they learn can help shape every aspect of your world.

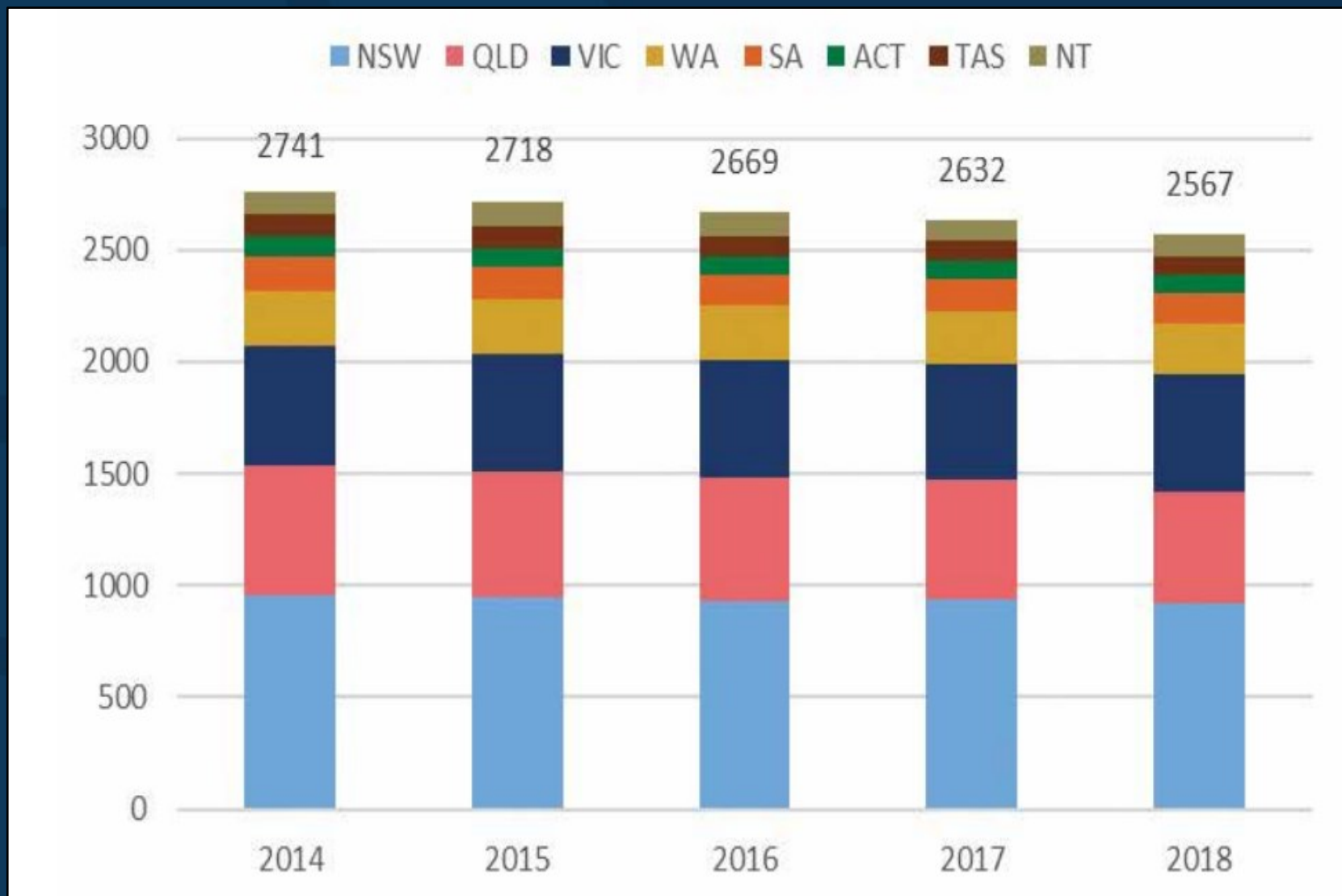
You can watch a video explaining the ins and outs of geospatial science if you click on the link below.

Find the video here





Undergraduate Student Enrolments and Completions



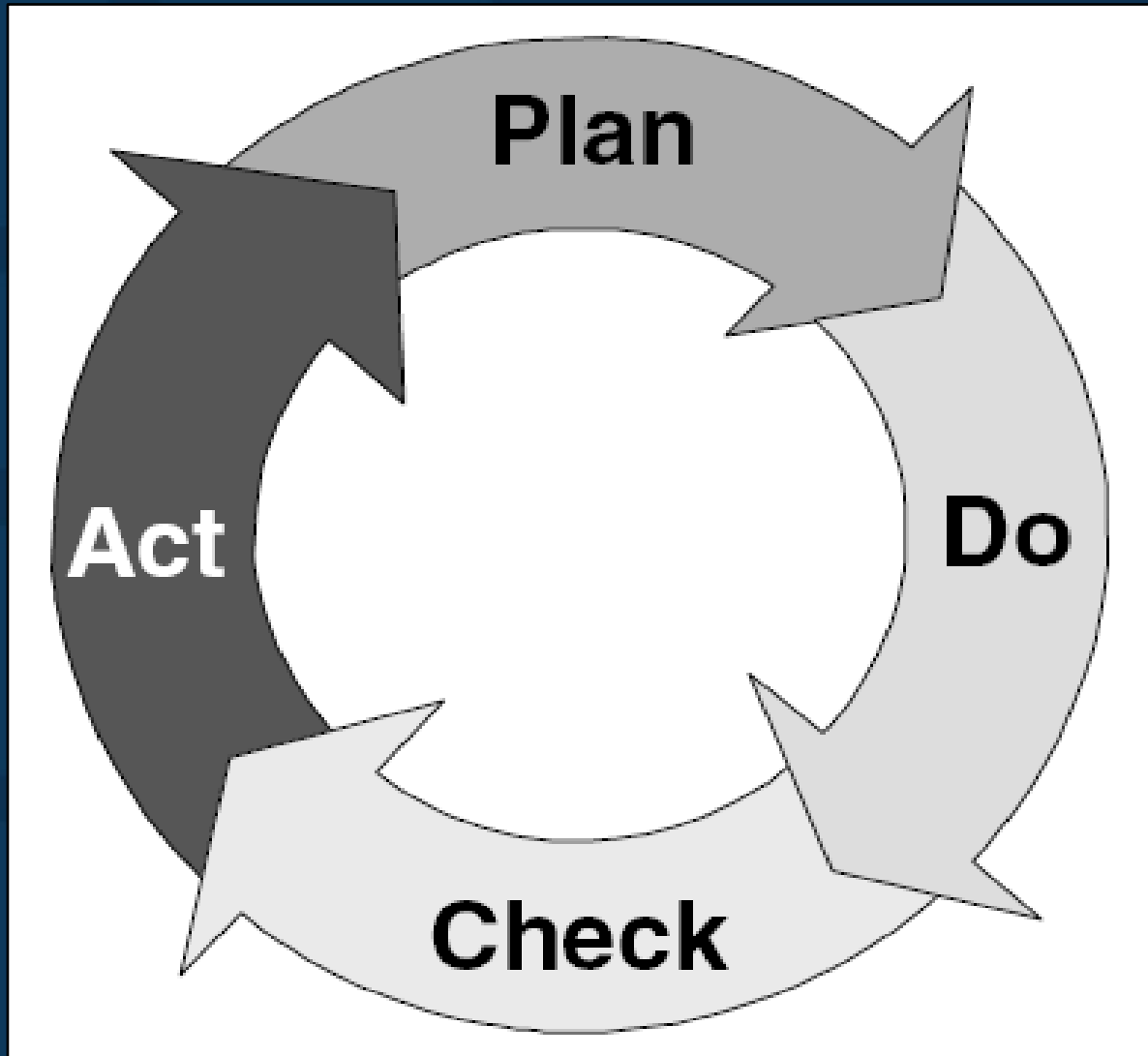
Number of Registered Surveyors in Australia

Investigate options to:

- strengthen reciprocity
- offer greater student mobility during the education process
- investigate centres of surveying education excellence which, could contribute to on-line delivery
- create education pathways with economies of scale
- develop national level sustainability for the production of Licensed Surveyors

The Funding Agreement between the Surveyors Board and UniSA identified the following objectives:

- Ensure the presence of a permanent UniSA lecturer with significant expertise in land surveying
- Hire of sessional staff from the surveying industry to assist with the delivery of the degree
- Purchase surveying equipment
- Develop promotional material for the marketing of the degree



Continuous Improvement

University	Nomenclature
Curtin University	Bachelor of Surveying (Hons)
RMIT	Bachelor of Applied Science (Surveying)
University of Newcastle	Bachelor of Surveying (Hons)
UNSW	Bachelor of Engineering (Surveying) (Hons)
University of Otago	Bachelor of Surveying (Hons)
UniSA	Bachelor of Engineering (Surveying) (Hons)
USQ	Bachelor of Spatial Science (Honours) (Surveying)
UTas	Bachelor of Surveying and Spatial Sciences (Hons)

<u>University</u>	Courses	Year
Curtin University	Cadastral Surveying/ Geoscience Honours Dissertation	4
RMIT	Cadastral Surveying 1; Cadastral Surveying 2	3; 3
University of Newcastle	None	N/A
UNSW	Cadastral Surveying & Land Law	2
University of Otago	Cadastral Surveying 1; Cadastral Surveying 2	2; 3
UniSA	Cadastral Surveying	4
USQ	<u>Cadastral Surveying (QLD/ NSW)</u> ; Land and Cadastral Law	2; 4
UTas	None	N/A

Successful nested degrees at USQ, UTas and the University of Otago

Enable students to:

- combine work and study
- have defined success along the way
- option to park their education at designated intervals
- reinforce study with period of full time cadastral surveying then return for next stage of study

Overview

Aim

Entry requirements

Content and structure



- Most universities have face to face delivery
- USQ offer online courses
- USQ academics tailored to interstate regulations
- UniSA offer two external courses as core from USQ and UTas
- Create centres of excellence
- Specialised research attract and retain high quality academics

2019 Cadastral teaching tour

- Overall feeling from surveying academics was one of excitement and collegiality
- Make cadastral surveying education
 - more efficient and effective
 - more enjoyable and creative
- Bring all Australia and New Zealand cadastral surveying academics together in a forum that will hopefully develop into a Community of Practice.

**CRSBANZ**
Council of Reciprocating Surveyors
Boards of Australia & New Zealand

Search for a Registered / Licensed
LAND SURVEYOR



Western Australia

Queensland

Northern Territory

New South Wales

South Australia

ACT

Tasmania

Victoria

New Zealand

Process to become a Licensed Surveyor

- 4 year surveying degree
- Boards establish standards of education, practical experience and competencies

CRSBANZ is the body representing all jurisdictions of Australia and New Zealand

- Primary objective ensure sufficient and common standards of survey practice, training and competencies required for registration, to enable full mutual recognition between jurisdictions

Goal 5:

A federated cadastral system based on common standards

Objective

To operate in the national interest and equip society with broader land and real property models to deal with local, cross-jurisdictional and global challenges.



Queensland registration - multiple levels of registration



Surveying Pathways

Evidence of competency and assessment
with the Surveyors Board of Queensland (SBQ)
2 Years (combined with employment)

**REGISTERED CADASTRAL /
MINING / ENGINEERING
SURVEYOR**

Evidence of competency
and assessment with SBQ
2 Years (combined with employment)

REGISTERED SURVEYOR

Undergraduate Degree
3-4 Years (full time)

GRADUATE SURVEYOR

Associate Degree
of Spatial Science
2 Years (full time)

SURVEY ASSISTANT (PARTY LEADER)

NSW registration process project-based assessment

**SUR
VEY
ING**

**Professional workshops &
examination with BOSSI**
3-5 Years (combined with employment)

**REGISTERED LAND SURVEYOR
REGISTERED MINING SURVEYOR**

Undergraduate Degree
4-5 Years (full time)

GRADUATE SURVEYOR

Diploma
1 Year (full time)

SURVEY ASSISTANT (PARTY LEADER)

Certificate IV
6 months (full time)

SURVEY ASSISTANT

Certificate III
6 months (full time)

SURVEY ASSISTANT

Study Pathways

The timeframe to complete a Professional Training Agreement (PTA) is currently heavily dependent on:

- scope of work and experience offered by graduates' employer
- competency of master surveyor
- employer's commitment to PTA
- ability to maintain PTA across jurisdictions
- availability of training resources and mentors to supplement PTA
- clear consistent guidelines of the overall registration process

Recommendations to reduce the post graduate training timeframe :

1. Work towards achieving a federated cadastral system (Cadastre 2034 Goal 5)
2. Expand tertiary education funding to include a post graduate training program
3. National competency assessment framework with cadastral endorsement as the prime objective
4. Empower a national peak body to deliver post graduate cadastral education, training and assessment.

The peak body to develop:

- internship program
- industry collaborate on training program
- program similar to masters qualification delivered by a Registered Training Organisation
- resource sharing to deliver economies of scale
- clear, consistent streamlined education, training and competency assessment pathway
- tiered qualification to recognise stages of competency based on Queensland model and adopted nationally
- system not reliant on volunteers
- national sustainable funding model like SA user pays Survey Plan Levy

- Universities willing to strengthen reciprocity
- more synergy across the degrees building partnerships
- The community feel to pave the way for centres of excellence
- achieve consistency and visibility of cadastral education in degree and course nomenclature
- achieve economies of scale through sharing online core courses

- CRSBANZ is most capable as the peak body to reduce training timeframes by developing a national post graduate training program.
- Develop national project-based assessment
- Prioritise Cadastre 2034 Goal 5 of a federated cadastral system that adopts tiered levels of registration with endorsements.
- Provide a clear consistent post graduate training pathway
- Share resources avoiding duplication of effort and delivering economies of scale
- Develop a sustainable funding model to provide graduates with a structured internship program with accomplished mentors like the medical profession.