

Review of SRBV's Licensing System: Issues Paper

Surveyors Registration Board of Victoria

13 August 2021



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Executive Summary

This Issues Paper summarises the key issues in the current approach to licensing cadastral surveyors in Victoria and identifies potential opportunities for reform. The paper should be read by interested members of the cadastral surveying community in Victoria and in other jurisdictions. We are seeking feedback to this paper through an online survey platform (see link <a href="https://example.com/https:/

The Surveyors Registration Board of Victoria (SRBV or the Board), as established under the *Surveying Act 2004* (Vic) (the Act) is the primary regulator for cadastral surveyors in Victoria.¹ The continued sustainability of a competent and experienced surveying profession is important to maintain Victoria's confidence in the cadastre.

The Act provides SRBV with a broad range of legislated functions and powers to regulate cadastral surveyors and 'ensure the community benefits from having competent licensed surveyors and confidence in Victoria's property system'.²

While the current licensing system is generally effective in ensuring that only fit and proper professionals undertake cadastral surveying, the industry is facing challenges around an ageing workforce and a dwindling pipeline of incoming cadastral surveyors that is insufficient to meet current and projected demand. In addition, the demographic composition of the surveying profession does not reflect the diversity of the Victorian community and there is an opportunity to address this.

Nous Group (Nous) has been engaged by SRBV to review the current licensing system and identify opportunities to re-design the existing licensing approach (The Review). Importantly, this Review represents a once-in-a-generation opportunity and SRBV has indicated an appetite for transformative changes to the licensing system. This issues paper is an important first step in confirming the key issues with the current approach and seeking input on how the licensing system could be evolved.

To date, three key themes and seven corresponding issues with the licensing system have been identified, summarised in Table 1.

Stakeholder feedback is sought at this time to explore:

- Whether key issues identified with the licensing system reflect the current problems and are appropriately articulated.
- Whether there are additional issues or concerns with the current licensing system.
- What changes to the licensing system would support a stronger pipeline of cadastral surveyors, while maintaining competency.

Licensed surveyors, candidates, students, supervisors, SRBV Board members, industry stakeholders and any other individual or group with an interest in the licensing system, are encouraged to provide feedback through our online survey (here). The survey will be open until Friday, 24 September 2021.

If you have any questions regarding the survey, please email surveyor@nousgroup.com.au.

¹ Parts 2,3 & 7 of the Surveying Act 2004, Victoria.

² Surveyors Registration Board of Victoria, SRBV Annual Report, 2019-20.

Table 1 | Summary of issues and opportunities identified to date

ТНЕМЕ	ISSUE	EMERGING REFORM OPPORTUNITIES
Theme 1: Current education pathways do not attract a diverse cohort or the optimal number of students to meet demand.	 There are mixed views about the extent to which a qualification should equip students with knowledge and skills specific to cadastral surveying. There are mixed expectations on what competencies graduates should have achieved by the time they complete their tertiary qualification. Mixed expectations about what graduates should know and be able to do also affects students' perceived readiness for the PTA. Clarifying expectations about the level of specialist cadastral surveying skills students should have at any time of graduation is an important foundation for this Review. The list of Board-accredited courses is limited. Many students do not want to study specialist degrees. There are no alternative education pathways outside of accredited university courses that students can complete. 	 SRBV could consider accrediting a broader range of courses, should they meet the agreed competencies required for qualification.³ This could include: Retain the status quo. Broader university offering, to include generalist degrees. Bridging courses for those with past work experience, international surveyors and/or unrelated degrees. A pathway for VET qualifications that lead to a licence.
Theme 2: The PTA model is a long-standing approach to providing professional training and relevant work experience.	 The PTA relies on formal, high-quality supervisors who are in short supply. Supervision is a time-consuming process. The nature of their work prevents some licensed surveyors from becoming supervisors. The PTA includes project work that has strict criteria, limiting candidates' ability to prove competency through their regular day-to-day work. Project requirements do not reflect the normal scope of practice of most supervisors and therefore surveying opportunities can be difficult to locate and be of limited long-term relevance. Candidates are assessed on their ability to navigate specific project scenarios rather than demonstrating competencies more generally. 	 SRBV could rethink the prescribed professional training and work experience component. Options include: Retain the status quo. Remove any requirement for minimum amount of training and work experience. Introduce an alternative model that focuses on work experience and omits a role for the supervisor. Change the role of the supervisor to a 'mentor' who would sign off on the surveyor's practical experience and introduce projects with less rigid requirements. Move to formal, standardised training modules that are completed alongside work experience.

³ SRBV's accreditation process is guided by *Attributes of Surveying Degrees: Australia and New Zealand* by John Fryer and Harvey Mitchell, this document provides consistency in the education process of graduates across Australia and New Zealand by CRSBANZ.

Theme 3: Granting a licence is impacted by balancing time and competency.

- 6. The Board adopts an examination-based approach to granting a licence which is inefficient. SRBV could review its examination model.⁴ Options
 - a. There is variation in the interpretation of the assessment criteria by examiners, supervisors and candidates.
 - b. There is limited capacity available to assess projects.
- 7. The existing, single surveyor license does not reflect the variation in surveyors' normal scopes of practice.
 - a. Licensing is a blunt activity which occurs late in the overall process.

SRBV could review its examination model.⁴ Options include:

- Retain the status quo.
- Provide written evidence of competency for administrative review.
- Demonstrate competence from day-to-day work through projects and/or an interview.
- 'Sit down' examinations.

SRBV could also re-design the current licensing system to adopt a tiered approach, with options of specialisation.

⁴ SRBV is guided by Assessing Cadastral Surveying Competency by Bill Hirst. This document has been prepared for CRSBANZ to help guide some consistency across Australia and New Zealand.

1 Introduction

The Surveyors Registration Board of Victoria (SRBV or the Board), as established under the *Surveying Act 2004* (Vic) (the Act) is the primary regulator for cadastral surveyors in Victoria.⁵ Cadastral surveyors set the legal boundaries that inform Victoria's land ownership rights and enable the maintenance of an authoritative, accurate and up-to-date cadastre. The cadastre is a comprehensive map that outlines the boundaries, size and record of rights and interests in land. It is the basis for land valuations that underpin levying on state and local government property and land taxations.⁶ The continued sustainability of a competent and experienced cadastral surveying profession is important for maintaining Victoria's confidence in the cadastre, underpinning land ownership, use and management in Victoria.

While the current licensing system is generally recognised to be effective in ensuring that only fit and proper professionals undertake cadastral surveying, there are concerns relating to the sustainability of the workforce with ageing and retiring surveyors outweighing the graduate supply. There are significant opportunities to transform the licensing approach, to improve the efficiency, reduce barriers to entry and increase the participation by women and persons from diverse backgrounds.

Nous Group (Nous) has been engaged by SRBV to identify opportunities to transform licensing of surveyors in Victoria. Importantly, this review represents a once-in-a-generation opportunity for reform and SRBV has indicated an appetite for transformative change to the licensing system.

1.1 This Issues Paper is the first stage in a comprehensive review that could transform how cadastral surveyors are licensed in Victoria

Consultation on this Issues Paper represents the final step of Stage 1 in a three-stage methodology (Figure 1).

2 HAND OVER FINAL REPORT **SHAPE AND ITERATE ESTABLISH A RICH UNDERSTANDING OF THE RECOMMENDATIONS FOR** AND RECOMMENDATIONS **ISSUES IN THE CURRENT** REFORM, WITH INPUT **AND SET A CLEAR** FROM KEY STAKEHOLDERS PATHWAY TO REPLENISH AND DIVERSIFY THE PIPELINE OF CADASTRAL **ISSUES PAPER** SURVEYORS IN VICTORIA.

Figure 1 | Nous' project methodology

As part of Stage 1, Nous completed a series of targeted consultations with key industry bodies and representatives (including active surveyors and supervisors), relevant regulators and government entities, as well as academic stakeholders.

The Issues Paper reflects the insights from these consultations and captures our understanding of the limitations of the current licensing system. It is designed to elicit stakeholder commentary on these issues - specifically whether the breadth of issues has been appropriately identified and to seek early feedback on how the licensing system could be transformed.

⁵ Parts 2, 3 & 7 of the Surveying Act 2004, Victoria.

⁶ Total taxes on property represented 56 per cent of total State and Local Government taxation revenue, valued at \$45,203 million.

Licensed surveyors, current candidates, students, academics and other individuals, peak bodies or interest groups are all invited to submit feedback to this issues paper via <u>this survey</u>. The consultation period will last until Friday, 24 September 2021.

Of note, for brevity, some of the questions in this Issues Paper are presented in a conflated way compared to the survey. For example, a question might ask 'do Issues 1 and 2 represent an accurate summary of the issues related to the education pathway for surveyors?' In the survey this question is repeated separately for Issue 1 and 2 in the survey to facilitate Nous' thematic analysis.

Following this consultation round, Nous will review all written submissions and engage in targeted follow-up consultation to develop options for reform to be considered by SRBV.

2 A new approach to licensing may be the key to a strong and diverse pipeline of cadastral surveyors

Section 2 sets out the theory behind regulation, SRBV's current legislative remit to license surveyors and some of the issues which are currently challenging the sustainability of the Victorian surveyor workforce.

2.1 There is an ongoing case for regulating the surveying profession

Regulation is a form of government intervention that is generally viewed as a 'last resort', as it imposes legal obligations on regulated entities.

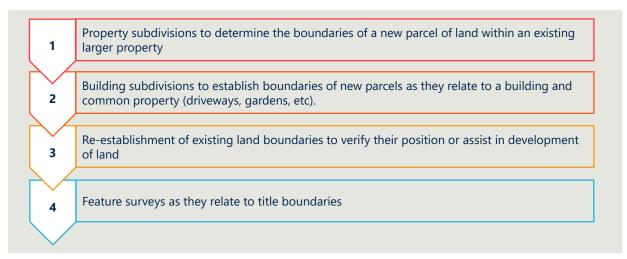
Occupational licensing is a form of regulation that requires industry professionals to obtain a licence before providing specific services. The licence sets a threshold for entry to ensure that the licensee is adequately skilled, qualified, knowledgeable, and experienced to perform the work. Occupational licensing is used to regulate professions where:

- Poor- or low-quality work can cause significant adverse outcomes and consumer harm.
- The technical nature of the work involves substantial information asymmetries which mean consumers are at risk of exploitation as they are unable judge the quality of the service provided and make informed future decisions.

Surveying is a technical profession where incorrect work has significant adverse outcomes for the community

Cadastral surveying is a small, but important cohort of professionals who ensure the accuracy of our property boundaries. Cadastral surveyors provide the core services set out in Figure 2.⁷

Figure 2 | Core functions of a cadastral surveyor



Only licensed surveyors can determine the positions of property boundaries in Victoria and undertake all of the functions outlined in Figure 2.8

⁷ PricewaterhouseCoopers, Report prepared for Consulting Surveyors National: Surveyors and the value of cadastral integrity, 2016 p. 14

⁸ Department of Environment Land Water and Planning, Legislation and regulation, 2021,

https://www.land.vic.gov.au/surveying/cadastral-survey/legislation-and-regulation>.

It is an offence under the Act for an unlicensed surveyor to assess and certify property boundaries or undertake any aspect of a cadastral survey (unless supervised by a licensed surveyor).⁹

A licensed surveyor must comply with the *Surveying (Cadastral Surveys) Regulations 2015* (the Regulations) when performing cadastral surveying work. The Regulations prescribe standards and other matters for cadastral surveys, including the specific surveying equipment used, accuracy of surveying, primary cadastral marks, making boundaries, and documentation and recording of surveying work that is required.

Occupational licensing is used to regulate those providing cadastral surveying services as it meets the two criteria:

- Poor- or low-quality surveying work can cause significant adverse outcomes and consumer harm.
 Licensed surveyors set boundary lines for new developments, subdivisions and easements. Their work
 provides the foundation for infrastructure developments and is the basis for financial loans on properties.
 Licensed surveyors are also an integral element of Victoria's building and construction industry. Reestablishment and feature surveys by licensed surveyors enable architects to understand the landscape
 when designing, and engineers to plan structures accurately and safely. Inaccurate property boundary
 definition has significant consequences for construction, property valuations, loans and state-based
 infrastructure investments.
- Surveyors require competencies in a broad range of technical and specialist skills. Licensed surveyors require a strong foundation in maths, cadastral law, planning systems and development patterns. They also require practical skills in using specialist surveying equipment such as total stations, GNSS Systems and specialised software. The complexity of the services provided is beyond what is expected of the average person without knowledge in the spatial sector. Therefore, consumers and governments rely on industry experts to provide accurate surveys.

A report by PricewaterhouseCoopers (PwC) analysed the importance of surveying and benefits of licensing the profession in Australia. It found that occupation licensing is essential to 'ensure the quality of surveyors and avoid errors in the cadastre.' An increase in the prevalence of errors by licensed surveyors has two flow-on consequences: first, it could lead to a large number of disputes relating to land boundaries and related costs required to investigate and determine the existence of errors. Secondly, there would be significant economic consequences in the form of additional re-establishments (estimated by PwC to be in the range of \$926.8 million) to correct errors to the cadastre.¹²

The regulation of the profession therefore remains essential to provide confidence and accuracy in the property boundaries that underpin Victoria's economic development and land ownership system. With recent initiatives such as the \$5.3 billion Victorian investment to construct more than 12,000 new homes and development of new greenfield areas¹³, the regulation of those that provide cadastral surveying services is even more critical to ensure the success of, and confidence in, new developments.¹⁴

⁹ Section 37 of the *Surveying Act 2004*, Victoria.

¹⁰ Cadastral services are most commonly procured by state and local government, developers, building practitioners and individual consumers (for example where a home is purchased and the boundaries need to be defined).

¹¹ PricewaterhouseCoopers, Report prepared for Consulting Surveyors National: Surveyors and the value of cadastral integrity, 2016, p. 22.

¹² PricewaterhouseCoopers, Report prepared for Consulting Surveyors National: Surveyors and the value of cadastral integrity, 2016, p. 23.

¹³ Greenfields are the development of new suburbs across Melbourne in new development areas such as Cardinia, Casey, Hume, Melton, Mitchell, Whittlesea, Wyndham and Latrobe City.

¹⁴ Premier of Victoria, Victoria's Big Housing Build, 2021 https://www.premier.vic.gov.au/victorias-big-housing-build.

2.2 SRBV oversees and maintains the occupational licensing system for surveyors in Victoria

The Act provides SRBV a range of functions and powers to regulate surveyors to 'ensure the community benefits from having competent licensed surveyors and confidence in Victoria's property system'. The Board's core functions can be summarised as:

- Register cadastral surveyors, including keeping a register of licensed surveyors, and overseeing the renewal process for licensed surveyors.
- Set out the competencies required to become a licensed surveyor, including determining the
 qualifications required for registration, accrediting courses of study, determining the practical training
 required, holding examinations to establish competence and publish guidelines about the educational,
 training and technical standards required for cadastral surveying.
- Regulate the professional conduct of surveyors, including investigating, or appointing a person to investigate on behalf of the Board, the professional conduct of licensed surveyors and imposing sanctions where necessary.
- **Provide a procedure for handling complaints against surveyors,** including investigating offences against the Act, or appointing a person to investigate on behalf of the Board, offences against the Act.
- Advise the Minister for Planning, including on the administration, policies and strategic directions of cadastral surveying.

To become a licensed surveyor in Victoria a person must apply to the Board – under the Act, the Board has the power to prescribe the approved qualifications, set the examinations and determine the practical and professional skills training that is required for registration. Once licensed, the Board has a number of legislative levers, including auditing and mandated professional development, to oversee and maintain the compliant practice of licensed surveyors.

¹⁵ Surveyors Registration Board of Victoria, SRBV Annual Report, 2019-20.

¹⁶ Section 5 of the Surveying Act 2004, Victoria.

Figure 3 | The steps in the licensing process in Victoria







ENTER AND COMPLETE LICENSING PROCESS



UNDERGO EXAMINATIONS AND RECEIVE LICENCE

DETAILS

Qualify for the qualification

- Year 12 with around 80 ATAR and some Maths/English subjects
- Diploma of Surveying and then Advanced Diploma of Surveying at RMIT
- Certificate IV in Surveying or Certificate IV in Tertiary Preparation with no prerequisite. Then, complete Diploma and Advanced Diploma of Surveying

Complete qualification

Pathway 1: University of Melbourne

Option 1: Bachelor of Environments, Design or Science with a Spatial Systems + 2 year Master of Engineering (Spatial)

(3 year undergraduate + 2 year Masters)

Option 2: Complete any undergraduate degree with WAM 65+, 2 maths subjects and 2 science subjects

- + 3 year Master of Engineering (Spatial) including three elective subjects:
- Cadastral Surveying
- Residential Land Development
- · Property Law

(3 year undergraduate + 3 year Masters)

Pathway 2: RMIT

Bachelor of Applied Science (Surveying) (Honours) (4 years)

Pathway 3: Complete equivalent qualification approved by the Board from interstate OR overseas (e.g. University of Southern Queensland)

Commence Professional Training Agreement

- 1. Find a Supervising Surveyor
- 2. Submit PTA documents to the Board for approval
- 3. Some PTAs are selected for start-up interviews
- 4. Supervisor and Candidate submit biannual report, documenting candidates progress and days of training

Complete supervised Rural and Urban Cadastral Surveys

(Minimum 60 days experience prior to starting surveys)

- Identify suitable surveys
- 2. Gain pre-approval from the Board
- 3. Complete survey within 12 months
- 4. Submit documents to the Board
- 5. Examined (Pass/Fail/Requisitions)
- 5. Moderated by the relevant Board member

Complete Professional Assessment Project

Documents Graduate Surveyor's involvement in a development process (assessed at the Professional Practice Interview)

Complete Cadastral Law Project

Hypothetical land development proposal written/prepared by SRBV

- Given to the applicant by the Board
- Must be completed in 6 months
- Examined and then moderated by the relevant Board member

Examiners assess surveys (urban and rural) and cadastral law project

- Examiners are assigned projects to assess (based on examiners preference of project type to examine)
- Each assessment is then checked by the relevant moderator

Complete Professional Practice Interview

- Candidate must have minimum 240 days cadastral and 120 days non-cadastral training
- Candidate applies for examination (Form 4 and 5)
- Candidate submits competency modules
- Two written letters of reference sent to the Board two weeks before interview
- Passed Cadastral Law, Urban and Rural Surveys resubmitted to the Board
- Professional Assessment Project submitted to the Board
- Three-person panel assessment
- Pass/Fail. If fail, reassessment criteria set by panel (and endorsed by Board), dependent on candidate's shortcomings

Alternative: recognition of interstate or New Zealand licensing

SRBV focuses its regulatory efforts on licensing as a key mechanism to ensure the competency of the cadastral surveying workforce.

Through all SRBV's regulatory activities, the Board seeks to satisfy itself that it is appropriately managing the risk that can arise from discrepancies in the cadastre and incorrect boundary determinations.

SRBV's approach to the regulation of surveyors focuses primarily on the oversight and management of licensed surveyors entering the market. That is, there is a high bar to become a licensed surveyor and surveyors who clear this bar are generally effective, with few instances having been reported of serious misconduct relating to surveying competencies, poor practices or behaviours.

To ensure the ongoing compliance of surveyors once they are licensed, SRBV relies on the resources of Surveyor General Victoria (SGV) for survey audits and complaints against the performance of surveyors, directly to SRBV, by the public and other professionals.

By contrast, in other occupational regulatory systems, it is easier to get an occupational licence in the first instance, but regulators spend more time and effort monitoring and enforcing compliance to detect and respond to potential competency issues in the workforce.

SRBV's regulatory focus could be rebalanced.

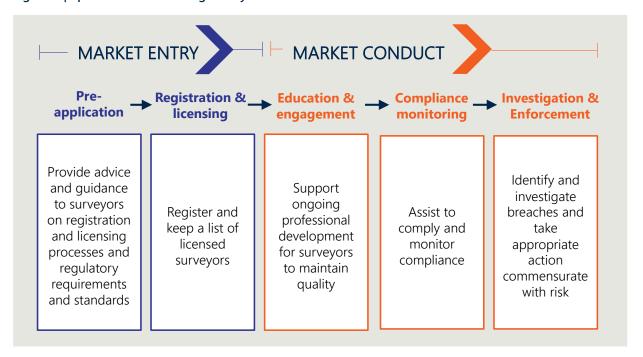
This Issues Paper explores ways to build a stronger pipeline of candidates entering the cadastral surveying profession.

It could, for example, be made easier for people to obtain a cadastral surveying licence - but the frequency or intensity of compulsory continuing professional development or proactive inspection and audits may need to be increased commensurately to pick up and address any risks in the quality of cadastral surveying.

Issues and opportunities related to the regulation of market conduct have not been explored at depth at this time but may warrant future attention.

The spectrum of SRBV's regulatory activities is shown in Figure 4 overleaf.

Figure 4 | Spectrum of SRBV's regulatory activities¹⁷



2.3 The surveying workforce faces supply and diversity issues

The cadastral surveying workforce is currently unsustainable, with fewer licensed surveyors joining the profession than leaving, creating a gap between labour demand and the projected workforce.¹⁸

There are also ongoing concerns as to the diversity of the cadastral surveying workforce, with limited participation by women and Culturally and Linguistically Diverse (CALD) persons.

The rigidity and length of the current licensing system is thought to exacerbate these issues.

Incoming workforce supply is insufficient to meet projected demand

A 2018 report by Consulting Surveyors National found that the surveying profession is experiencing a workforce gap nationally, ¹⁹ with surveyor shortages expected to exist in Victoria through to 2028. Demand for cadastral surveys is largely influenced by the demand in the construction sector²⁰ and recent Victorian Government infrastructure initiatives, such as Big Build, may see a spike in the demand for licensed surveyors.²¹

Declining numbers over the past decade are also cause for concern. Figure 5 shows the number of licensed practising surveyors registered in Victoria has declined by seven per cent since 2013 and this is of particular concern given the workforce faces attrition from licensed surveyors approaching retirement age.

¹⁷ The 'market conduct' activities are not within scope of this review.

¹⁸ Consulting Surveyors National (2018) *Determining the Future Demand, Supply and Skills Gap <*https://www.thesurveyorstrust.org.au/resources/Documents/Determining%20the%20Future%20Demand%20Supply%20and%20Skills%20Gap%20for%20Surveying%20and%20Geospatial%20Professionals%20-%202018-2028.pdf p.46

¹⁹ The report defines a workforce gap as a situation in which the workforce demand exceeds available supply.

²⁰ PricewaterhouseCoopers (2016) Report prepared for Consulting Surveyors National: Surveyors and the value of cadastral integrity

²¹ Victoria's Big Build https://bigbuild.vic.gov.au/>.

Eight per cent of the surveying and geospatial workforce are expected to retire in the next seven years in Australia.²² Figure 5 also outlines the current age distribution of licensed surveyors.

-7% 426 101 100 418 418 409 398 fotal number of practising oractising licensed surveyors, by age Total number of icensed surveyors 28 8 25-34 35-44 45-54 55-64 65-74 42 per cent of licensed surveyors are older than 54

Figure 5 | Total number of practising licensed surveyors registered in Victoria (2013 – 2021) and age distribution of surveyors

In the year 2019/20, the SRBV removed 13 licensed surveyors from the register who either did not renew their registration or died. In contrast, only seven new licensed surveyors were registered. Four graduate surveyors completed their training and received registration and three licensed surveyors gained registration in Victoria through the Mutual Recognition arrangements with other jurisdictions.²³ Currently, the rate of PTA enrolments and of newly licensed surveyors are insufficient to match the rate at which licensed surveyors are expected to retire or leave the workforce.

and only 7 per cent are younger than 35.

In addition, current enrolment data for the Victorian accredited surveying courses indicates there has been a decline since 2015, apart from a temporary uptick in 2018.²⁴ This is in contrast to science, technology, engineering and mathematics (STEM) related university degrees across Australia, which have seen a steady increase in enrolments (see Figure 6).

2013

2015

2017

Source: Licensed surveyor data between 2013 and 2021, provided by SRBV

2019

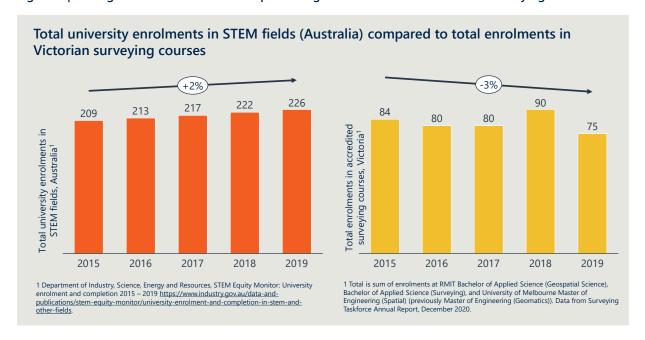
2021

²² Consulting Surveyors National & BIS Oxford Economics, 'Determining the Future Demand, Supply and Skills Gap for Surveying and Geospatial Professionals'.

²³ Surveyors Registration Board of Victoria, SRBV Annual Report 2019-20. Surveyors who hold a license in another Australian jurisdiction are recognised to carry out surveying work in Victoria. Licensed Surveyors from another Australian State/Territory or New Zealand may apply for registration in Victoria under the provisions of the *Mutual Recognition Act 1992*. The Council of Reciprocating Surveyors Boards of Australia and New Zealand (CRSBANZ) supports mutual recognition across Australia for licensed surveyors.

²⁴ A slight uptick may be a consequence of the Life Without Limits initiative discussed below at 'low numbers and poor diversity are partly associated with a lack of understanding about the surveying profession'.

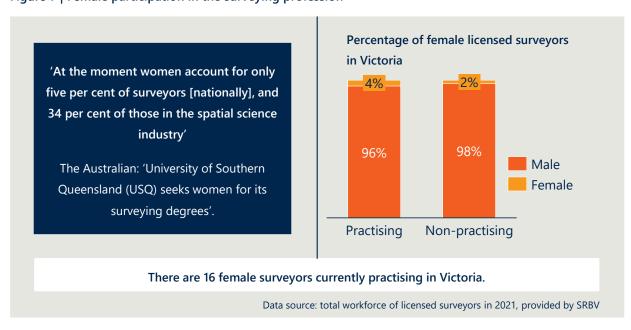
Figure 6 | Total growth in STEM fields compared to growth in Victorian accredited surveying courses



The pool of licensed and practicing surveyors does not reflect the diversity of the Victorian community

The current workforce of licensed surveyors does not reflect the diversity of Victoria's community. For example, women are significantly under-represented in the profession. Female licensed surveyors only make up four per cent of practising licensed surveyors and two per cent of non-practising licensed surveyors (Figure 7). Anecdotal evidence also suggests the workforce has very little diversity in terms of people from CALD or Aboriginal and Torres Strait Islander backgrounds.²⁵

Figure 7 | Female participation in the surveying profession



²⁵ Currently there is no available data from SRBV on number of Aboriginal and Torres Strait Islander licensed surveyors or licensed surveyors from CALD backgrounds.

The limited engagement in surveying from women and people from CALD backgrounds may affect the future workforce pipeline as core segments of Victoria's population appear to face barriers to joining the industry.²⁶

Female participation in the industry is recognised in the 2019-2020 annual report as a priority focus area for SRBV 27

Low numbers and poor diversity are partly associated with a lack of understanding about the surveying profession

Stakeholders consulted to date report a general lack of awareness of the cadastral surveying profession and how it is different to other construction-related, field-based professions.

Often, new surveyors gain interest in the workforce by knowing a surveyor or having worked in an adjacent field. The lack of awareness - or misinformation about surveying - reduces the pool of students interested in pursuing surveying qualifications²⁸ and perpetuates historical perceptions of a male dominated industry, which deters some young female entrants.

'There aren't many women in the field because they either don't know surveying exists or it's just not for them.'

Female surveying student

'The Board is mindful of the need to maintain professional training procedures and further education and training requirements to attract more females to the profession.'

SRBV Board

In 2019, the Surveying Taskforce established the *A Life Without Limits* National Alliance. The purpose of this alliance aims to transform the perception of the surveying sector in Australia and attract people to a surveying career.²⁹ University of Southern Queensland (USQ) has also developed a series of initiatives, including scholarships for female students studying surveying degrees and specific engagement activities for schools targeting girls in Years 4-12.

It is not clear whether initiatives such as *A Life Without Limits* and initiatives by USQ will have long-term effects on the number of enrolments in university, or uptake by women. Some stakeholders suggest that challenges should be addressed by long-term strategic planning and that more can be done by the Board to support initiatives, publicise the profession and increase female participation.

Stakeholder questions

- How can SRBV best raise awareness of the cadastral surveying profession?
- How can SRBV support industry, universities or other stakeholders to encourage more diverse students to pursue surveying qualification?

SRBV's current approach to licensing is a barrier to a diverse and sustainable workforce

Several stakeholders engaged to date as part of this Review have commented on the long and arduous process required to become a licensed surveyor.

²⁶ SRBV may also need to consider policies and procedures to promote gender equality in the industry under section 7 of the *Gender Equality Act 2020* (Cth).

²⁷ Surveyors Registration Board of Victoria, Annual Report 2019-20 < https://admin.surveyorsboard.vic.gov.au/uploads/10/docs/(SRBV)%20Annual%20Reports/SRBV%20Annual%20Report%202019-2020.pdf p 31

²⁸ Fryer. J and Mitchell, H, Attributes of Surveying Degrees: Australia and New Zealand (2013) < https://www.bossi.nsw.qov.au/ data/assets/pdf file/0007/185749/Attributes of a Surveying Degree.pdf, p. 45.

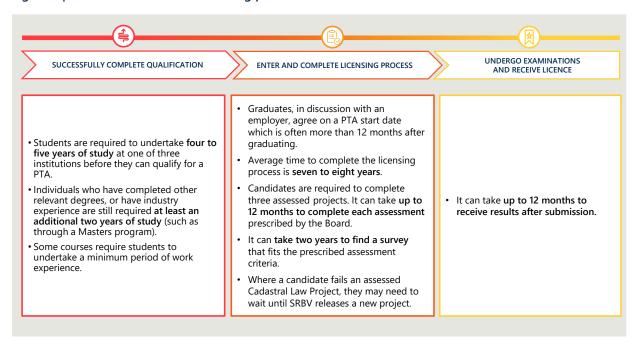
²⁹ Surveying Task Force, Surveying Task Force Annual Report (2020) https://sssi.org.au/SSSI/files/e1/e18a7f9b-6c9c-4565-88e6-9d26a62b30ea.pdf.

On average, the PTA and licensing steps (as set by the Board) takes an average of 7.6 years to complete - and this does not include the four to five years of study at prescribed universities that candidates must undertake before they are eligible to commence SRBV's assessment process.

The length and intensity of the process is a significant disincentive to many people interested in becoming a licensed surveyor - particularly when it is compared to the licensing processes for other adjacent industries. For example, few other spatial professions require any form of licence, while architects require two years of practical experience³⁰ and the completion of an exam, and the Victorian Building Authority's (VBA) process for registering building practitioners takes an average of eight to 12 weeks.³¹

There are a number of points along the current process where substantial delays occur and present a disincentive for joining the profession. This is described in Figure 8 and the causes of these issues are explored further in Section 3.

Figure 8 | Timeframes across the licensing process



³⁰ Architects Act 1991, section 10.

³¹ Victorian Building Authority, building practitioner registration https://www.vba.vic.gov.au/building/registration.

3 There are several issues with the existing licensing system

Section 3 of our report documents the key issues we have identified to date. These issues relate to three key themes:

- 1. Current education pathways do not attract a diverse cohort or the optimal number of students to meet demand.
- 2. The PTA model is a long-standing approach to providing professional training and relevant work experience.
- 3. Granting a licence is impacted by balancing time and competency.

For each theme and associated issue/s, Nous has included some emerging commentary on how the surveyors licensing system could be transformed, using a range of alternative mechanisms. This is informed by our research and analysis, and engagement with stakeholders to date.

Theme 1 | Current education pathways do not attract a diverse cohort or the optimal number of students to meet demand

There are ongoing concerns about the current enrolments in Victorian surveying courses and what this means for the diversity and future pipeline of graduate surveyors.

In part, the stagnant student enrolment numbers are a result of the limited scope and rigidity of education pathways. This is evident through the two issues identified to date:

- There are mixed views about the extent to which a qualification should equip students with knowledge and skills specific to cadastral surveying.
- The list of Board-accredited courses are limited.

These are described below.



Issue 1 | There are mixed views about the extent to which a qualification should equip students with knowledge and skills specific to cadastral surveying

There are mixed expectations on what competencies graduates should have achieved by the time they complete their tertiary qualification.

To date, The Review has heard mixed views from stakeholders about the required proficiency of students at graduation, and how well current accredited courses are meeting this expectation.

For example, some stakeholders have indicated that the role of university is to provide a sound foundation for analytical thinking, but the cadastral surveying-specific education that graduates require to be successful can be provided by employers on entry into the profession. Other stakeholders have suggested that students should have acquired comprehensive cadastral surveying skills during their qualification and should be well prepared to undertake such surveys with the appropriate support.

These differences in expectations are particularly relevant given the quantity of cadastral surveying specialist content has been dwindling in universities' curriculums in recent years, attributable to the fact that universities are under significant pressure to move towards larger courses and more generalist degrees. The expectations of qualifications are made more complicated when taking into account the minimum competency requirements of the Board, which are guided by those specified in the *Attributes of Surveying Degrees: Australia and New Zealand*³². There is a potential tension for the Board in meeting the minimum competencies set out in this paper and also managing industry (and potential graduates) expectations for those competencies. Council of Reciprocating Surveyors Boards of Australia and New Zealand (CRSBANZ) is currently looking to establish a consistent expectation of competency levels for graduates.

Mixed expectations about what graduates should know and be able to do also affects students' perceived readiness for the PTA.

The PTA (described in Theme 2 below) requires a substantial level of competency in cadastral surveying practices and cadastral law. Most graduates work in the industry for some time before they are proficient enough to begin the assessment process to be licensed. The mixed perceptions of the length of time between graduating and entering a PTA is seen by some stakeholders to be a deterrent and may account for why surveying graduates choose to work in other spatial professions after graduation or remain as surveying graduates years after they have completed their degree.

³² John Fryer and Harvey Mitchell, Attributes of Surveying Degrees: Australia and New Zealand (2013)

https://www.bossi.nsw.gov.au/ data/assets/pdf file/0007/185749/Attributes of a Surveying Degree.pdf>.

Clarifying expectations about the level of specialist cadastral surveying skills students should have at any time of graduation is an important foundation for this Review.

Stakeholders' views are currently being sought on the extent to which a qualification should equip students with knowledge and skills specific to cadastral surveying.

If there is a consensus view that subject matter expertise is a core part of a student's formal education, The Review can plan for ways to bridge this knowledge gap. Alternatively, if students can expect to be exposed to cadastral surveying content 'in the field', The Review can explore ways to facilitate access to these learning opportunities faster.

Stakeholder questions

- Should students be expected to have comprehensive cadastral surveying knowledge and skills at the completion of a qualification?
- In your view, are students currently graduating from accredited courses with a sufficient level of expertise?



Issue 2 | The list of Board-accredited courses is limited

Many students do not want to study specialist degrees.

Academic stakeholders have indicated that the requirement for students to choose from such a narrow list of accredited courses is a deterrent for prospective students to explore a career as a surveyor and ultimately seek a licence to work in the profession.

Recently, the structure of university degrees has broadly shifted towards more generalist undergraduate qualifications that provide students 'breadth before depth'. Specialist accredited courses (such as those currently required by SRBV) attract small class numbers. As enrolments decline, courses become increasingly financially unviable for universities to run.

'Scrutiny is put on specialist subjects with limited numbers, and pressures are exerted onto academics to find ways to combine or eliminate small classes.'

Academic stakeholder

Academic stakeholders indicate pressure to re-design surveying courses so they can be delivered as part of larger generalist degrees. This is, however, difficult to do while still meeting the specific accreditation requirements set by CRSBANZ. The accreditation approach is currently being considered by CRSBANZ, who have developed a nationally consistent approach to the process of accrediting surveying courses.

There are no alternative education pathways outside of accredited university courses that students can complete.

A lack of alternative education pathways reduces the potential pool of people who may wish to seek registration. There are three sub-points to this issue:

 SRBV does not accredit online surveying courses. Online courses can be more attractive to older students who undertake part-time study while working or raising a family. They can also provide greater opportunities for regional students to complete surveying courses who might otherwise be deterred by having to move to metropolitan centre.

In Queensland, USQ provides an accredited online surveying course and has seen a stable increase in engagement from Victorian students. Some stakeholders have attributed this to the course's greater flexibility.

- People with previous work experience in adjacent professions cannot fast-track their qualifications.
 Surveying exists within a broader spatial profession. Under the current system, if someone in an adjacent profession is interested in becoming a licensed surveyor, they are required to complete an accredited degree, irrespective of their level of industry experience or understanding of the underlying mathematical and spatial competencies.
 - Some industry stakeholders have suggested that bridging courses may offer a fast-track pathway to attract experienced professionals into the surveying profession.
- There are no VET pathways directly into the PTA for students who prefer practical learning approaches.³³ There is wide recognition among industry that VET provides an effective pathway for potential surveying candidates to then complete university. There is, however, no opportunity to move from completing a vocational qualification straight into the PTA. While VET offers a different approach to course deliver when compared to universities, there would not necessarily be any compromise in the level of skills or academic knowledge attained through the qualification.

We note SRBV is currently limited in their ability to accredit alternative pathways due to the minimum competency requirements set out in *Attributes of Surveying Degrees: Australia and New Zealand*. As noted above, the content and attributes for approved surveying qualifications as described in this document are currently under review, which may present an opportunity to consider VET pathways into licensing.

These alternative pathways may enable greater participation in the surveying workforce by professionals who take on surveying later in their career, regional and remote students and/or those who are more interested in a practical style of learning.



Emerging ideas for reform...

SRBV could accredit a broader range of courses, should they meet the agreed competencies required for qualification. Examples of additional course-types include:



There may also be other options to attract and support a higher number of students to pursue an interest in surveying.

³³ SRBV may be limited in their flexibility to accrediting VET pathways due to the minimum registration requirements as set out by Council of Reciprocating Surveyors Boards of Australia and New Zealand (CBSBANZ)

Stakeholder questions

- Do Issues 1 and 2 represent an accurate summary of the issues related to the education pathway for surveyors?
- Are there other issues at play in relation to the education pathway for surveyors?
- How big a barrier are these issues in the challenge of attracting and supporting students to achieve a strong pipeline of qualified surveyors in Victoria?
- With consideration to the ideas for reform identified above, what changes to the education pathway would be most instrumental in supporting more people into the profession?
- What other reform options exist to change the education pathway for surveyors?
- Based on your response to the previous two questions what would SRBV need to do to ensure they are appropriately managing risks and maintaining the integrity of the system?

Theme 2 | The PTA model is a long-standing approach to provide professional training and relevant work experience

The objective of the PTA is to provide a structured training program to assist a graduate surveyor with overall continuing education, training and development of skills.³⁴ To achieve this objective, there are four key projects that a candidate must complete to receive their licence. These are described below:

- **Urban and rural cadastral survey projects**: these two surveys must meet strict requirements set by the Board. The Board pre-approves these surveys.
- Cadastral Law Project: this is a hypothetical land development proposal prepared by SRBV. The project requires the candidate to develop a report for the client listing the options available and detailing the recommended actions and associated risks.
- **Professional Assessment Project**: this is an opportunity for the candidate to demonstrate competence and professionalism in managing phases of the subdivision process for an actual client. The candidate is required to provide copies of all relevant plans, and documentation prepared for the project. This project is reviewed immediately prior to the Professional Practice Interview (PPI) and its assessment forms part of that interview. The PPI is undertaken at the final stage of the PTA process.

The candidate is supported by their supervisor throughout their PTA.

Stakeholder questions

- What knowledge and skills do candidates require to be effective surveyors (at the time they are first licensed)?
- Should candidates be required to *demonstrate* their involvement in particular training programs or work experiences to be eligible for a licence?
- If the answer to the previous question is 'yes', how should training and work experience be verified, and by whom?

³⁴ Surveyors Registration Board of Victoria, Professional Training Agreements,

< https://www.surveyorsboard.vic.gov.au/content/109/pta.aspx >

The PTA model represents a long-standing approach to providing professional training and relevant work experience. There are three issues associated to this theme are:

- The PTA relies on formal, high-quality supervisors who are in short supply.
- The PTA includes project work that has strict criteria, limiting candidates' ability to prove competency through their regular day-to-day work.
- Candidates are assessed on their competencies through specific project scenarios rather than demonstrating competencies more generally.

These issues are explored below.



Issue 3 | The PTA relies on formal, high-quality supervisors who are in short supply

Under the current licensing system, it is a requirement of the candidate to be supervised by a practicing licensed surveyor. Finding a supervisor and then subsequently starting the PTA is reported to be a significant challenge - stakeholders have reported that some candidates wait up to 18 months to be signed on with a supervisor, and others are forced to move between different employers to secure a supervisor.

Some stakeholders consulted to date indicated that the current requirements relating to supervisors can also create perverse incentives for businesses to delay graduates' starting their licensing processes. Specifically, because there are few eligible supervisors, some businesses can retain skilled but unlicensed employees on a lower graduate salary. One stakeholder consulted to date reported that some firms lure graduates into positions on the promise of getting them onto a PTA, but then retain them on a graduate salary for a protracted time while they wait for a supervisor to become available. However, other stakeholders consulted to date noted they had not heard of this practice occurring.

Some stakeholders consulted also highlighted that good, licensed surveyors do not necessarily make good supervisors which can bring inconsistencies in the supervision provided to candidates. Training or support for supervisors could go some way to addressing this, however in many instances this may relate to the licensed surveyor's personality and characteristics (which can be more difficult to change).

Supervision is a time-consuming process.

Supervisors have a substantial role in providing an appropriate learning environment for their PTA candidate. The supervisor's responsibilities include:

- Developing a suitable PTA for the candidate, including supporting them to find surveys that meet project requirements.
- Reviewing and providing guidance to the surveyor on all projects and surveys before submission.
- Reporting to the Board about the candidate during the training agreement (through biannual reports) and at completion of the PTA.

These responsibilities require significant effort from the supervisor. For example, one supervisor consulted to date indicated that it took them over 11 hours to review one of their candidate's law projects. This highlights how taking on a candidate is a significant time commitment for the supervisor.

Supervisory responsibilities also create a significant administrative burden for supervisors which can be exacerbated for those working in small surveying firms, who may feel the time and economic costs of training graduates and providing the required level of supervision is unfeasible.

Of note, other professions like engineers and architects do not have supervisors as part of their licensing process.

'For smaller companies it's about the diversity of work you have to offer to a field candidate - it's not economical to take on candidates.'

Licensed surveyor

The nature of their work prevents some licensed surveyors from becoming supervisors.

The current PTA process requires candidates to complete a range of projects and surveys that must be reviewed and guided by the nominated supervisor. This requirement means that some employment contexts do not suit training a candidate to become a practicing licensed surveyor.



Issue 4 | The PTA includes project work that has strict criteria, limiting candidates' ability to prove competency through their regular day-to-day work

While the PTA is designed to be completed in three years, the average candidate takes 7.6 years³⁵ and part of this delay is attributable to the challenge of identifying project opportunities through their day-to-day work that aligns with the PTA requirements.

Project requirements do not reflect the normal scope of practice of most supervisors and therefore surveying opportunities can be difficult to locate and be of limited long-term relevance.

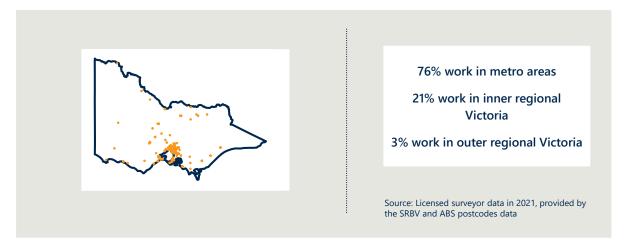
Due to the strict criteria for each project, it can be difficult for candidates to gain exposure to the broad range of cadastral surveying skills required of them in the PTA.

A 2016 survey commissioned by the Surveying Taskforce provides evidence for this - it found that that "access to employer jobs that meet project criteria" was the most significant barrier to completing a PTA, and that "access to suitably qualified people to cover areas of knowledge that may not be totally familiar to your supervising surveyor" was the second most important factor in completing the PTA in the expected timeframe.

Securing survey jobs that satisfy project requirements is particularly challenging. For example, Figure 9 shows the registered business address for licensed surveyors, highlighting that the vast majority of licensed surveyors work in metropolitan areas around Melbourne, whereas only three per cent work in 'outer regional Victoria'. Not only does this mean that rural cadastral surveying opportunities are hard to come by, but it also means that few licensed surveyors actually conduct multiple rural surveys across their career, which means this skill set may have limited relevance to their normal work. This is also the case for licensed surveyors based in regional locations, who may not perform urban surveys across their career.

³⁵ Data provided by the SRBV as at 2 July 2021. This figure is a 3-year average calculated based on candidates that have completed their PTA between 2019 and 2021.

Figure 9 | Map of licensed surveyors in Victoria





Issue 5 | Candidates are assessed on their ability to navigate specific project scenarios rather than demonstrating competencies more generally

Project-based assessment is central to the current model of licensing, where the candidate's competency is assessed through the completion of projects and the submission of competency checklists by their supervising surveyor. This assessment methodology emphasises how well candidates can complete specific projects, rather than testing for the proficiency of the skills they perform 'on the job'. In contrast, some stakeholders consulted to date noted that a project-based assessment does not test candidates' competency in their day-to-day work, but rather how well they can tick the box of passing a project.

The current assessment process also requires the completion of projects using older methodologies that may be relatively obsolete in industry. For example, some stakeholders highlighted that the rural survey must be completed by traditional field traversing and checking techniques. This is instead of using GNSS technology, even though an overwhelming majority of contemporary rural surveys use this approach.

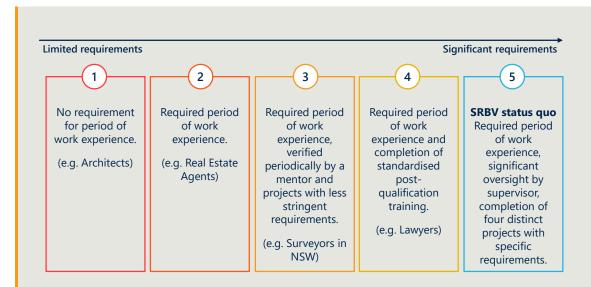
There is also no mutual recognition of a candidate's prior work experience in other jurisdictions as part of the licensing process. As a result, candidates must still navigate the set project scenarios; even if they can demonstrate their competencies from their work in another jurisdiction.



Emerging ideas for reform...

Given the issues identified with the current PTA model, there are significant opportunities to rethink the prescribed professional training and work experience component of the licensing process.

SRBV could look to models that exist in other professions to identify potential future options. As shown below, such models can be considered along a spectrum of intensity, ranging from having no requirement to perform professional training and demonstrate work experience through to the need to complete formalised training and demonstrate multiple facets of experience.



The four ideas for reform are described below.

Remove any requirement for a minimum amount of training and work experience. To become a Registered Architect in Victoria, candidates are not required to complete a minimum amount of work experience. Instead, individuals must have an approved postgraduate degree in architecture and complete the Architectural Practice Examination (discussed further under Theme 3). This means that at the time a qualified architect enters the profession, they are not expected to have extensive work experience.

Introduce an alternative model that focuses on work experience and omits the role of supervisors. To gain a licence to practice as an Estate Agent in Victoria, individuals must show they have gained at least one year of full-time work experience. Similarly, SRBV could approve the completion of a specified amount of practical experience and candidates could self-assess against a list of core competencies and experiences prescribed by SRBV.

Reduce the role of the supervisor to a 'mentor' who would sign off on the surveyor's practical experience and introduce projects with less rigid requirements. Surveyors in New South Wales (NSW) currently must complete a minimum amount of work experience guided by a 'mentor', as well as five projects. The role of the mentor is to review and provide feedback on projects and answer questions from candidates. The mentor is less involved in assessing competency than the supervisor's role is in Victoria. This less intensive role allows NSW mentors to guide more than two candidates at a time. The projects completed by candidates in NSW provide more flexibility with respect to the requirements of projects. This approach makes identifying and completing projects much easier than in Victoria, placing less of a burden on the mentor to guide the candidate. SRBV could introduce a similar model, reducing the role of mentors and providing greater flexibility for project requirements.

Move to formal, standardised training that is completed alongside work experience. This model is currently used to become a Lawyer in Victoria. Individuals can complete one of Victorian Legal Admissions Board's approved Practical Legal Training Courses.³⁶ These courses include set coursework and subjects, and a period of work experience.³⁷ SRBV could adopt a similar post-university qualification that assess candidates module by module on key elements of surveying competency.

https://www.collaw.edu.au/Learn%20With%20Us/Our%20Programs/Practical%20Legal%20Training%20Programs >

³⁶ Victorian Legal Admissions Board, Practical Legal Training Course, 2021, <

https://www.lawadmissions.vic.gov.au/qualifications-and-training/practical-legal-training-course >

³⁷ The College of Law, Practical Legal Training Programs, 2021 <

Stakeholder questions

- Do Issues 3, 4 and 5 represent an accurate summary of the issues to the model for gaining practical training and work experience?
- Are there any other issues at play in relation to gaining practical training and work experience?
- How big a barrier are these issues in supporting a strong pipeline of qualified surveyors in Victoria?
- With consideration to the ideas for reform identified above, what changes to the model for gaining practical training and work experience would be most instrumental in supporting candidates to receive a licence?
- What other reform options exist to change the model for gaining practical training and work experience?
- Based on your response to the previous two questions what would SRBV need to do in other
 phases of the licensing process or in the market conduct space to ensure they are appropriately
 managing risks and maintaining competency?

Theme 3 | Granting a licence is impacted by balancing time and competency

After a long process of studying at university and then commencing and completing the PTA projects, candidates must then submit their materials to SRBV for examination. This examination and licensing process is extremely time consuming and arduous for candidates, supervisors, examiners and SRBV. It does not reflect a modern, fit for purpose licensing system.

Two significant issues have been identified that relate to the examination and licence granting process. These are:

- The Board adopts an examination-based approach to granting a licence which is inefficient.
- The existing, singular surveyor licence does not reflect the variation in surveyors' normal scopes of practice.

These issues are explored below.



Issue 6 | The Board adopts an examination-based approach to granting a licence which is inefficient

Stakeholders consulted to date have reported that the examination process can be unnecessarily stressful, with there being some obscurity around what is expected or how exams are marked. Stakeholders have also reported significant delays in navigating this step.

There is variation in the interpretation of the assessment criteria by examiners, supervisors and candidates.

Stakeholders consulted to date have highlighted that candidates and their supervisors currently receive limited information about what is required to complete their projects, as well as the format in which they should be prepared. As a result, a candidate and their supervisor can spend significant time and effort on completing their project, only to then receive a fail or requisition where they have not met the criteria.

This issue was also noted numerous times by PTA candidates in the Taskforce 2016 survey. Some of their responses are illustrated in Figure 10 below.

Figure 10 | Quotes by PTA candidates on current assessment approach



Some stakeholders consulted to date suggested that this was because criteria could be interpreted differently by different supervisors, candidates and even examiners. Some highlighted that a lack of training for examiners may be partly responsible for this.

Stakeholders also noted that under the current model, poorly presented projects reach examiners for assessment - when they are largely non-compliant- rather than being deemed non-compliant at an earlier point. This adds to the time burden on examiners who may have multiple projects to assess.

There is limited capacity available to assess projects.

Under the current arrangements in Victoria, there is an approved list of examiners for each of the PTA projects. When a project is received, SRBV contacts its list to ask for an examiner to assess candidates' projects. In some cases, it can take several months to find an available examiner.

Examiners are often practising licensed surveyors themselves, which means they largely assess candidates' projects in their spare time. While SRBV has a nominal payment for examiners to recognise their effort (which has been increased in recent times), past and present examiners consulted to date indicated that this does not address the challenge of having little time to mark the paper.

This issue results in a significant time delay for candidates from when they submit their projects to receiving an outcome. A number of industry stakeholders indicated that the examination process can take up to 12 months in total in some cases. Where a candidate receives a requisition from the Board, candidates are then required to respond within 60 days.

Of note, SRBV appears to be taking steps to address this issue, with a number of licensed surveyors recently having been added to the list of approved examiners, who can then share around the load of assessing projects.



Emerging ideas for reform...

There are a number of examination models that SRBV could consider to ensure a candidate has the competencies required to be an effective licensed surveyor. These options can be considered along a spectrum from requiring minimal effort to involving significant effort.

Limited effort Significant effort 2 3 Written evidence Demonstrate set **Formal** SRBV status quo from employer competencies from examination or time consuming confirming length day to day work project. projects with very and present to the of employment specific (e.g. Architects) and duties Board. requirements that performed. must be completed (e.g. Surveyor by all candidates. (e.g. Conveyancing) Board Queensland)

The three ideas for reform are described below.

• Provide written evidence of competency for administrative review: An alternative model that exists in some professions is one where the candidate must demonstrate they have completed a set amount of work experience, with no requirement for further testing. This model exists for conveyancing in Victoria, where one option for registration is for candidates to have completed the equivalent of 12 months' full-time experience within the last five years, carrying out conveyancing work under the supervision of a legal practitioner or a fully licensed conveyancer.

In their application, a candidate must provide written evidence from their employer confirming their employment, the hours spent on conveyancing each week and detailing the list of conveyancing duties performed.³⁸ Such a model places significant emphasis on the skills an individual may learn in their day-to-day work, with their employer then certifying their proficiency.

Should a similar approach be adopted by SRBV, such evidence would require an administrative review by the Board, to confirm all relevant material and evidence has been provided.

• Demonstrate competence from day-to-day work through projects and/or an interview: Rather than specifying the type and nature of projects that must be completed, SRBV could adopt a model that allows candidates to demonstrate appropriate competencies with evidence from their day-to-day work. Queensland adopted a competency-based assessment in 2003 that requires candidates to submit a portfolio of evidence of their competency as a surveyor. This does not have to be a specific activity (i.e., a rural survey), but must instead showcase all the required competencies. Once the candidate has demonstrated their competency in each element identified in the competency framework, they attend an interview with the Board. This interview is an opportunity to discuss the evidence submitted by the candidate and tests their overall qualifications, skills, knowledge and experience.³⁹ Stakeholders expressed that the Queensland competency system tests the risk the candidate will pose to the system after they receive their licence by looking at the quality and quantity of their day-to-day work as a surveyor.

Should a similar model be adopted in Victoria, it would retain the role of SRBV examiners in making an assessment of a candidate's competency but significantly reduce the burden on candidates to complete set projects.

• 'Sit down' examinations: SRBV could adopt a formal examination that is standardised and completed by candidates simultaneously. This model exists for architects in Victoria, who are required to complete the 'Architectural Practice Examination' which is conducted twice-yearly

³⁸ Consumer Affairs Victoria, 'Apply for a conveyancer's license – individual, < https://www.consumer.vic.gov.au/licensing-and-registration/conveyancers/apply-for-a-licence/individual >

³⁹ Surveyors Board Queensland, Competency Assessment – What is it? < http://sbq.com.au/competency-assessment/ >

across all Australian States and Territories. The exam is three-parts and assesses your knowledge and understanding of the practice of architecture in Australia. This model would provide greater clarity on assessment criteria.

Stakeholder questions

- Are examinations a critical step to the licensing process that should be retained in some capacity in the future model?
- Does Issue 6 represent an accurate summary of the issue relating to the examination component of licensing?
- How big a barrier is this issue in supporting a strong pipeline of qualified surveyors in Victoria?
- Are there any other issues at play in relation to the examination approach?
- With consideration to the ideas for reform identified above, what changes to the examination approach would be most instrumental in supporting candidates to receive a licence?
- What other reform options exist to change the licensing approach?
- Based on your response to the previous two questions what would SRBV need to do to ensure they are appropriately managing risks and maintaining competency?



Issue 7 | The existing, single surveyor licence does not reflect the variation in surveyors' normal scopes of practice

Licensing is a blunt activity which occurs late in the overall process.

The licensing process occurs quite late in a surveyor's professional career, compared to other regulated industries. For example, it is common for lawyers to become registered lawyers in their jurisdiction after one year of commencing graduate employment.

Many licensed surveyors now work in specialist areas, or in multi-disciplinary firms on large projects. Victoria's current approach to licensing does not recognise these evolving work practices, which means that many surveyors spend time training in areas where they will never work again. Other cadastral surveyors have developed deep expertise in a niche field of surveying which is not appropriately reflected in their licensing status.



Emerging ideas for reform...

Licensing models can be either rigid or tiered with different 'levels' recognising different stages of experience. These two options are illustrated below.



A tiered licensing approach is described in further detail below.

Re-design the current licensing structure to adopt a tiered approach. SRBV could introduce different levels of licensing, with the first for university graduates so this group can become licensed on graduation. For example, SRBV could introduce tiers of licences that reflect the different knowledge, skills and experience of different surveyors.

In Queensland, there are four levels of surveying licences – surveying associate, surveying graduate, registered surveyor, and registered surveyor with Endorsement.⁴⁰ SRBV could introduce a graduate surveying licence for graduates (with certain restrictions) to work as a surveyor while they continue to gain practical experience in the profession and work towards a complete, unrestricted licence. This would also help to address Issue 1, as currently the requisite knowledge to begin the licensing process (the PTA) requires graduates to work in the industry and obtain relevant work experience before starting.

Stakeholder questions

- Is a single category of licence for cadastral surveyors an important element of the licensing system that should be retained in the future model?
- Does Issue 7 represent an accurate summary of the issue relating to the examination component of licensing?
- How big a barrier is this issue in supporting a strong pipeline of qualified surveyors in Victoria?
- What categories of licence should exist (if any)?
- If there were to be different levels of registration, what statutory limitations and advantages would relate to which level?

⁴⁰ Surveyors Board Queensland, 'Levels of Registration' < http://sbg.com.au/registration/>.

4 Next steps

Feedback in response to this Issues Paper will be collected until Friday, 24 September via the link here.

Feedback to this Issues Paper will be a critical input to Nous' next steps, which will start to shape reform options to strengthen the pipeline and diversity of cadastral surveyors in Victoria.

Nous will continue to strategically engage with stakeholders across The Review's life cycle to ensure recommendations for reform are suitably ambitious, while being grounded in reality and compatible with the existing rigorous standards of the regulatory system.

Appendix A Summary of consultation questions

Below we detail all our consultation questions. Please respond to these questions here.

Sastian Overtions			
Section	Questions		
Section 2	 How can SRBV best raise awareness of the cadastral surveying profession? How can SRBV support industry, universities or other stakeholders to encourage more diverse students to pursue surveying qualification? 		
	students to pursue surveying qualification:		
Section 3, Theme 1	• Should students be expected to have comprehensive cadastral surveying knowledge and skills at the completion of a qualification?		
	 In your view, are students currently graduating from accredited courses with a sufficient level of expertise? 		
	 Do Issues 1 and 2 represent an accurate summary of the issues related to the education pathway for surveyors? 		
	Are there other issues at play in relation to the education pathway for surveyors?		
	 How big a barrier are these issues in the challenge of attracting and supporting students to achieve a strong pipeline of qualified surveyors in Victoria? 		
	 With consideration to the ideas for reform identified above, what changes to the education pathway would be most instrumental in supporting more people into the profession? 		
	What other reform options exist to change the education pathway for surveyors?		
	 Based on your response to the previous two questions what would SRBV need to do to ensure they are appropriately managing risks and maintaining competency? 		
Section 3, Theme 2	• What knowledge and skills do candidates require to be effective surveyors (at the time they are first licensed)?		
	• Should candidates be required to <i>demonstrate</i> their involvement in particular training programs or work experiences to be eligible for a licence?		
	• If the answer to the previous question is 'yes', how should training and work experience be verified, and by whom?		
	 Do Issues 3, 4 and 5 represent an accurate summary of the issues to the model for gaining practical training and work experience? 		
	Are there any other issues at play in relation to gaining practical training and work experience?		
	 How big a barrier are these issues in supporting a strong pipeline of qualified surveyors in Victoria? 		
	 With consideration to the ideas for reform identified above, what changes to the model for gaining practical training and work experience would be most instrumental in supporting candidates to receive a licence? 		
	 What other reform options exist to change the model for gaining practical training and work experience? 		
	 Based on your response to the previous two questions what would SRBV need to do in other phases of the licensing process or in the market conduct space to ensure they are appropriately managing risks and maintaining competency? 		
Section 3, Theme 3	• Are examinations a critical step to the licensing process that should be retained in some capacity in the future model?		
	• Does Issue 6 represent an accurate summary of the issue relating to the examination component of licensing?		
	• How big a barrier is this issue in supporting a strong pipeline of qualified surveyors in Victoria?		
	Are there any other issues at play in relation to the examination approach?		

- With consideration to the ideas for reform identified above, what changes to the examination approach would be most instrumental in supporting candidates to receive a licence?
- What other reform options exist to change the licensing approach?
- Based on your response to the previous two questions what would SRBV need to do to ensure they are appropriately managing risks and maintaining competency?
- Is a single category of licence for cadastral surveyors an important element of the licensing system that should be retained in the future model?
- Does Issue 7 represent an accurate summary of the issue relating to the examination component of licensing?
- How big a barrier is this issue in supporting a strong pipeline of qualified surveyors in Victoria?
- What categories of licence should exist (if any)?
- If there were to be different levels of registration, what statutory limitations and advantages would relate to which level?

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ABOUT NOUS -

Nous Group is an international management consultancy operating across Australia and New Zealand, the UK, Ireland and Canada. For over 20 years we have been partnering with leaders to shape world-class businesses, effective governments and empowered communities.

