

### Statutory Review of the Professional Engineers Registration Act 2019

Submission by Victoria and Tasmanian Branch, AITPM

### About AITPM

AITPM (the Australian Institute of Traffic Planning & Management) is the leading national membership body representing Australian Transport Community professionals and practitioners. AITPM members and stakeholders work in fields including transport planning, transport and traffic engineering, transport modelling, active travel, travel demand management and travel behaviour change.

AITPM members and stakeholders work together to ensure multimodal transport systems are designed, built and operated in ways that support healthy people, communities and economies in all parts of Australia. To set a strong foundation for this mission, AITPM has adopted a Policy and Principles Platform that addresses how AITPM will advocate on behalf of the broader Transport Community for the creation of successful transport systems. The AITPM Policy and Principles Platform is provided as Attachment 1 to this submission. See <u>www.aitpm.com.au/policy/policy-platform</u> for further information.

#### Introduction to submission

The Victorian and Tasmanian Branch of the Australian Institute of Traffic Planning & Management (AITPM) welcomes the opportunity to contribute to the statutory review of the Professional Engineers Registration Act 2019 (PERA). This submission is grounded in AITPM's Policy and Principles Platform, which guides our advocacy for transport systems that are sustainable, safe, efficient, inclusive, resilient, and responsive to place.

AITPM generally supports the principle of professional registration for engineers as a means to ensure quality, safety, and accountability across the sector. However, our members, many of whom work at the intersection of transport planning, transport engineering, and infrastructure delivery, have identified a number of issues with the current scheme that "prohibit" their ability to apply for PERA, thereby affecting their ability to operate effectively and contribute to positive transport outcomes in Victoria.

These issues are not only of professional concern but also carry broader implications for how transport systems can deliver on the goals of healthy people, communities, and economies. If not carefully addressed, aspects of the scheme may inadvertently constrain innovation, limit interdisciplinary collaboration, and reduce the flexibility needed to respond to emerging challenges in transport and land use planning.

Our submission seeks to ensure that the registration framework evolves in a way that supports the full diversity of transport engineering and planning expertise required to deliver integrated, future-ready transport systems for Victoria.

### Request for action

AITPM encourages the Victorian Government to ensure that the Professional Engineers Registration framework reflects the diversity of skills and pathways within the Transport Infrastructure profession. Many practitioners in transport planning, modelling and engineering bring deep expertise from disciplines such as civil engineering, planning, economics, and data science — Often gained through postgraduate study and/or decades of practical experience. In particular we draw *Professional Engineers Registration Act 2019* proponents' attention to the current **Box 4** as is specified in the PERA application flow chart logic, as follows:



We support the intent of maintaining high professional standards, and believe this can be achieved through a more inclusive approach that recognises both traditional and non-traditional qualifications. Providing a clear, experience-based pathway to registration — as seen in many international examples — would help align formal recognition with the full range of capabilities needed to deliver integrated and future-ready transport systems.

For one example of this we draw attention to the Chartered Institute of Highways and Transport UK (CIHT) "Further Learning and Training Report" route to CEng registration:

https://www.ciht.org.uk/professional-development/get-qualified/routes-to-ceng-and-ieng-forapplicants-without-accredited-academic-qualifications/

#### What do AITPM members do?

Transport planning and engineering are multidisciplinary fields that underpin the design, delivery, and management of transport systems across Australia. AITPM recognises the transport community as a collective of professionals working across diverse domains to create sustainable, safe, efficient, and inclusive mobility outcomes. Their work is essential to shaping transport systems that support healthy people, communities, and economies:

- **Designing and delivering transport systems**: Planning and designing multimodal networks (roads, rail, active and public transport) aligned with land use and long-term strategy.
- **Managing traffic and network operations**: Overseeing network performance through signal design, congestion mitigation, and traffic modelling.
- **Applying modelling and analytics**: Using data and simulation software to inform investment, policy, and scenario planning.
- **Developing policy and strategic plans**: Creating frameworks that guide infrastructure investment and support broader social and environmental goals.
- **Improving safety and accessibility**: Conducting road safety audits, Safe System Assessments and designing inclusive infrastructure to reduce risk and improve access for all users.
- Advancing sustainability and decarbonisation: Promoting mode shift, electrification, and lowemission design to support Net Zero targets.
- **Engaging stakeholders**: Collaborating with communities, agencies, and industry to co-design transport solutions.
- **Building capability**: Mentoring future professionals and contributing to best practice through training and knowledge sharing.

### The Reality of the PERA Framework for many AITPM members

Transport planning and traffic engineering are inherently interdisciplinary fields, drawing on expertise from a wide range of academic backgrounds including engineering, mathematics, geography, town planning, economics, and the social sciences. Many AITPM members, particularly those who have migrated to Victoria, hold qualifications in these disciplines and have built extensive careers in transport planning, engineering and modelling over decades.

Despite their deep expertise and practical contributions, the current PERA framework almost always excludes them from registration (without even considering any of the five competency standards) unless they hold a Washington Accord-accredited engineering degree. This narrow credentialing pathway fails to reflect the diversity of the transport profession and creates systemic barriers for highly capable individuals. These professionals often lead major projects, mentor junior staff, and shape transport policy and infrastructure delivery across Victoria, yet they are now deemed "ineligible" to apply for registration and can therefore work solely under circumstances requiring supervision. This exclusion runs counter to the principles of inclusivity and equity that underpin AITPM's Policy and Principles Platform, and risks discouraging talented individuals from entering or remaining in the Victorian transport sector.

The consequences of this exclusion are not merely administrative - they affect the integrity and effectiveness of the profession. AITPM is aware of multiple cases where practitioners with over 20 years of experience in transport planning and engineering have been denied registration due to their formal qualifications, while individuals with as little as five years of experience could be authorised to oversee their work. This misalignment between formal qualifications and practical capability undermines professional confidence, introduces inefficiencies, and may compromise the quality of transport system outcomes. It also risks creating unintended hierarchies that favour credentials over established and proven competence, which is neither fair nor productive.

AITPM strongly supports the goal of maintaining high professional standards but urges the Victorian Government to consider alternative pathways to obtaining PERA that recognise practical experience, demonstrated competence, and interdisciplinary contributions rather than exclusively

focusing on whether the applicant has a Washington Accord qualification. A more inclusive approach would better reflect the realities of the transport sector and help ensure that the registration scheme supports, rather than hinders, the delivery of healthy people, communities, and economies.

# Impact on Diverse Transport Sectors: An Example – Transport Modelling

Transport modelling is a core capability underpinning infrastructure planning, operations, and investment in Victoria. It spans a wide spectrum, from **strategic demand modelling** to **mesoscopic and microsimulation models**, each requiring different technical competencies. The narrow focus on Washington Accord-accredited engineering degrees fails to recognise the interdisciplinary expertise that many professionals bring to their roles.

While **engineering judgment** is clearly relevant in some areas of modelling (particularly at the detailed end, such as microsimulation and operational modelling), it is not the sole or even primary skillset across the broader transport modelling field. In fact, the competencies required to undertake modelling work, especially at the **strategic and policy interface**, are grounded in:

- Statistics and mathematics (e.g. regression modelling, machine learning, matrix estimation),
- **Economics** (e.g. value of time, elasticity, benefit-cost analysis),
- Behavioural science (e.g. discrete choice modelling, travel behaviour research),
- Computer science and software development (e.g. scripting, model integration),
- Systems thinking and policy evaluation.

Many leading professionals in the field hold postgraduate qualifications in **transport science**, **economics**, **applied maths**, or related fields. Despite having deep domain expertise and decades of project experience, these individuals may fall outside the PERA framework due to the absence of a Washington Accord engineering degree, and therefore may be deemed to require supervision, including by junior staff whose only differentiating feature is a qualifying degree in engineering.

This creates a risk that the **integrity, independence, and quality of modelling** could be compromised, especially when modelling findings are used to underpin multi-billion-dollar infrastructure decisions.

AITPM encourages the Victorian Government to:

- Develop **fit-for-purpose registration pathways** for experienced modelling professionals with qualifications and experience in relevant disciplines, such as transport modelling, data science, or economics.
- Avoid blanket supervision requirements that force highly capable and recognised modelling professionals to work under individuals with narrower or less relevant qualifications.

This approach would better reflect the diversity of the transport profession, support the delivery of technically sound and policy-aligned outcomes, and maintain a fair and credible professional landscape in Victoria.

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policy@aitpm.com.au +07 3544 5670 23 July 2025 Attachment 1: AITPM Policy and Principles Platform

## WHY ARE TRANSPORT SYSTEMS IMPORTANT?

The impact of a successful transport system shows up as healthy people, communities and economies. Transport links and activates places, enabling people and businesses to access:

- · Goods and services
- Jobs
- · Education and training
- · Health services
- · Entertainment, sport and recreation
- · Friend and family networks

AITPM is committed to educating governments and the community on the importance of successful transport systems – and, in turn, a properly resourced Transport Community – in ensuring healthy and prosperous outcomes for Australians.





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## **OUR PURPOSE**

AITPM's purpose is to raise the profile of the Transport Community. The community's practitioners and stakeholders are critical participants in delivering a sustainable, efficient, accessible and safe transport system.

Every day people across Australia's Transport Community identify, investigate, plan, develop and implement solutions to achieve this. In doing its work, the aims of the Transport Community include:

- Supporting a switch to sustainable transport choices, to help reduce Australia's emissions and lessen transport's impact on the environment
- Growing national and community prosperity by enabling the safe and efficient movement of people, goods and services
- Delivering inclusive transport services that provide access to opportunities for all users
- Building the resilience of communities and businesses by ensuring transport networks remain safe and connected under changing external conditions, including natural disasters
- Integrating the movement of people and vehicles within flourishing places in different geographic settings, from cities and towns to rural and regional areas.



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### SUCCESSFUL TRANSPORT SYSTEMS ARE CREATED THROUGH

- 1. Integrated transport and land use planning at all levels, from future-focused strategic planning to the implementation of site-specific developments
- 2. The application of sound, long-term, non-partisan and evidence-based public policy, with crosssectoral support
- 3. The systematic collection, monitoring and evaluation of transport data to support decisionmaking
- 4. The consistent application of a range of appropriate contemporary modelling tools by suitably resourced professionals
- 5. A culture of research and innovation that is collaborative across sectors and disciplines
- 6. Genuine, inclusive engagement, collaboration and co-design activities encompassing all communities and stakeholders
- 7. A holistic 'Safe Systems' approach covering all transport infrastructure and operations, and the interactions between people, vehicles and the transport environment
- 8. Sustainable and transparent funding and pricing models that support desired strategic transport outcomes
- 9. A diverse and welcoming community of transport professionals that has the capacity to handle the demands placed on it
- 10. Capable transport practitioners with the qualifications, skills and experience to plan, design, engineer, deliver, operate and manage Australia's transport systems
- 11. The commitment of governments and industry to educate and support the next generation of transport professionals.
- As the national association for transport professionals, AITPM leads the Transport Community in connecting, collaborating and delivering, developing industry skills, capability and knowledge as we create successful transport systems together.

We are the collective voice of the Transport Community, and we advocate for delivering sustainable, efficient, accessible and safe transport systems



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## WHO IS PART OF THE TRANSPORT COMMUNITY?

The Australian Transport Community is made up of professionals from a wide range of disciplines and backgrounds, including:

- Transport planners
- Traffic and transport engineers
- · Land use, transport and traffic modellers
- · Road safety practitioners
- Transport economists
- · Road and public transport infrastructure designers
- Active transport specialists
- Travel behaviour change specialists
- · Transport researchers, educators and engagement professionals
- Transport policy specialists.



To design, deliver and manage transport systems, this community of transport professionals connects to a broader network of professions and suppliers covering these areas of focus

- Urban and regional planning
- · Transport and traffic data collection and analysis
- · Modelling programs and resources
- Traffic management and control
- Intelligent transport systems
- · Infrastructure supply, engineering and construction
- Transport service operations from rail through to micromobility.



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