

Australian Society for Concrete Pavements “Innovation Fund” Policy

Scope of Fund

The Australian Society for Concrete Pavements National Executive have establish a criteria for evaluating funding assistance applications from our concrete pavement 'innovation fund'. The fund is open to applications from individuals, researchers and companies under the following areas of;

- **concrete pavement technology,**
- **concrete pavement design,**
- **concrete pavement materials and**
- **concrete pavement construction**

This policy gives guidance on issues such as; amount of funding allocated, subject to reserves held in any fiscal year, frequency or rounds conducted in any calendar year, the review process(es) and leverage options through collaboration with like-minded government, universities, and NGO.

Innovation Fund Objectives

The aim of the Innovation Fund is to support our primary mission; **to facilitate the advancement of knowledge and technology related to concrete pavements through education, technology transfer and research in Australia -- leading to improved concrete pavement design, construction and life cycle performance [durability].**

The following criteria was developed to identify projects that not only promise significant advancements in concrete pavement technologies but also demonstrate feasibility, sustainability, and potential for broad impact. Project applications should have clear and established funding options, with expectations on deliverables, knowledge sharing/dissemination plan, milestones and collaboration pathways.

Evaluation Criteria

Based on a simple review of existing comparable industry 'innovation funding' the following evaluation criteria is provided for each category:

1. **Innovation, Originality, Design, and Constructability:** The degree to which the proposed technology represents a novel approach or a significant improvement over existing solutions. The extent to which the design introduces new concepts or significantly improves upon existing pavement design methodologies. Novel construction methods or significant improvements to existing methods that increase efficiency, quality, or sustainability.
2. **Technical Feasibility, Practicality, Compatibility, and Integration:** The likelihood that the proposed technology can be successfully developed and implemented, including considerations of the current state of technology and available expertise. The practicality of implementing the design in real-world settings, considering current construction practices and industry standards. The ease with which the material can be integrated into existing pavement construction practices. The likelihood that the pavement industry will adopt the

technology, considering factors such as ease of integration into existing processes and compatibility with current equipment.

- 3. Environmental Impact, Sustainability and Considerations:** The potential of the technology to reduce environmental impacts, including reductions in carbon footprint, improved recyclability, and reduced use of non-renewable resources. The use of new or improved materials that offer better performance, sustainability, or reduced environmental impact. The design's contribution to sustainability, including the use of eco-friendly materials and practices that minimize environmental impact. The material's contribution to environmental sustainability, including recyclability, reduced carbon footprint, and lower resource consumption. The method's impact on reducing the environmental footprint of pavement construction, including emissions, waste, and resource use.
- 4. Performance, Durability, Scalability and Adaptability:** The potential for the technology to be scaled up for widespread use and its adaptability to different pavement contexts and conditions. The potential of the design to enhance pavement performance, longevity, and resilience to weather and traffic conditions. The degree to which the material improves pavement strength, durability, and longevity. The method's adaptability to different project scales, geographic locations, and environmental conditions. The use of technology to enhance construction precision, efficiency, and outcomes.
- 5. Cost-Effectiveness, Innovation in Material Production:** An assessment of the technology's potential to reduce construction and maintenance costs compared to current practices. Advances in the production process that reduce costs, improve efficiency, or lessen environmental impacts. The economic benefits of the material, including lower costs, reduced maintenance, and longer lifecycle. The cost-effectiveness of the design in terms of construction, maintenance, and lifecycle costs. The potential of the construction method to reduce costs and time while maintaining or improving quality. Any leverage / synergies with other funding bodies or industry partners to co-fund projects, extend the fund's reach, and maximize its impact.
- 6. Safety, Health and User Comfort:** Enhancements in safety features and user comfort, including noise reduction, smoother rides, and improved drainage. Improvements in safety and health for construction workers and the public during and after construction.

Funding and criteria

The criteria will be tailored to the specific goals and priorities of the innovation fund, and they may be adjusted based on stakeholder feedback and evolving industry needs.

Beyond the evaluation criteria for applications, managing an innovation fund for concrete pavement involves several strategic considerations to ensure its effectiveness and sustainability. The following issues must be considered:

1. Amount of Fund Allocation

Budget Allocation: Determine the total annual budget for the fund based on available resources and strategic priorities. This budget should be aligned with the expected impact and the number of projects you aim to support.

Project Funding Caps: Funding amounts for individual projects, which can vary by category (e.g., technology, design, materials, construction) to reflect the different scales and scopes of projects, accordingly, funding allocation will be decided on a case-by-case basis.

Flexible Funding Models: Consider flexible funding models such as full funding, matching funds, or milestone-based funding to accommodate a range of projects and incentivize progress and completion.

2. Frequency or Rounds Conducted in Any Calendar Year

Annual or Biannual Rounds: Funding rounds are planned to be annually initially or more frequently, such as biannually. The choice should balance the need to provide timely support for innovations with the administrative capacity to manage the application and review process.

Special Calls for Proposals: In addition to regular funding rounds, the National Executive will consider occasional special calls for proposals that target specific urgent or high-priority challenges in the field of concrete pavement.

3. Application and Review Process

Transparent and Fair Review Process: The National Executive be responsible for the review process. The National Executive Members contains diverse panel of individuals from industry, and government to evaluate applications based on the established criteria. Conflicts of interest should be declared and observed during the review.

Feedback Mechanism: A mechanism to provide constructive feedback to applicants, especially those not selected for funding, to encourage improvement and future submissions.

4. Monitoring and Evaluation

Project Milestones and Reporting: Require funded projects to define clear milestones and regular progress reports to monitor their advancement and ensure accountability.

Impact Assessment: Develop a framework for assessing the short-term and long-term impacts of funded projects on advancing concrete pavement technology, design, materials, and construction practices.

5. Collaboration and Partnership

Encourage Collaborations: Foster collaborations among academia, industry, and government transport agencies to leverage a wide range of expertise, resources, and networks for the successful development and deployment of funded innovations.

Partnership with Other Funding Bodies: Explore partnerships with other funding bodies or industry partners to co-fund projects, extend the fund's reach, and maximize its impact. E.g Austroroads, NTRO, NACEO

Innovation Fund Incubator Program: Consider an "Innovation Fund Incubator" program that not only provides financial support but also offers technical mentorship (e.g. enticing some of our industry experts with financial support), industry connections, and business development resources to selected projects. This program could run in cohorts, with each cohort going through a structured support program designed to accelerate the development and commercialization of their innovations. This approach encourages not just technological innovation but also market readiness, increasing the chances of successful adoption and impact in the concrete pavement industry.

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