



# Infrastructure for sustainable futures

Challenges, opportunities and questions to inform community engagement and social practice

START

Situation Analysis 2023

Institute for Infrastructure in Society  
[www.nextgenengagement.org](http://www.nextgenengagement.org)

  
Next Generation  
Engagement 



Australian  
National  
University

CRAWFORD SCHOOL  
OF PUBLIC POLICY

# Building a sustainable infrastructure future with and for communities

**The Next Generation Engagement Program launched in 2017 with the ambition to see community engagement better professionally recognised, more systematically applied, and more advantageously integrated into major infrastructure project selection, planning and delivery. We asked, ‘How can we do community engagement better and in doing so, deliver the infrastructure we need more efficiently and with better outcomes for impacted communities?’**

Six years later, that germinating seed of an idea has grown into a stand-alone research institute; the Institute for Infrastructure in Society (I2S) at the Australian National University. Thanks to our participants’ years of in-field experience with communities impacted by major projects, combined with our team’s state-of-the-art social science research, I2S is reconfiguring how one of Australia’s largest sectors thinks about the risks of its projects and its intergenerational impacts on communities.

World-first, research-derived tools, including our Infrastructure Engagement Excellence (IEE) Standards, have now been applied to more than \$10 billion in infrastructure projects. I2S’ Social Risk Maturity Framework is supplying on-ground teams with evidence-based tools that allow them to articulate the often intangible, inconsistent and misunderstood social concerns that are associated with major infrastructure projects. Our work on community engagement as a profession is supporting thousands of social practitioners to make stronger cases for their early and more influential involvement in major infrastructure projects. Advice we provide to government is informing the better and earlier integration of social practice into major projects, in more robust and systematic ways. With our many partners and industry participants, I2S is shaping the discourse of infrastructure practice, with ‘social licence’, ‘engagement’ and ‘social risk’ now far more prominent than when we began.

Our work started by articulating the key challenges, opportunities and questions for the infrastructure sector, as they related to community engagement, social risk and social licence to operate. Our [2017 Situation Analysis](#) provided the basis for large-scale co-design of a dynamic social and policy science research agenda, focused on the value of community engagement, policy and practice, engagement timing and approaches, measurement and professionalisation of social practice.<sup>1</sup>

Today, our second Situation Analysis marks an inflection point in our efforts to propel world-leading social practice for major infrastructure projects. Here, we again highlight the key challenges, opportunities and questions for major infrastructure, from a societal perspective. The provocations this time reflect our deeper insights derived from I2S’ research, our strongly integrated relationships with sector practitioners and industry partners, and a substantially changed infrastructure context, honed by natural disasters, the pandemic, geopolitical unrest and international financial uncertainties.

**Our global, intergenerational livelihoods will be shaped within this complex, pressurised and intensive infrastructure environment. It leads this Situation Analysis to ask the big question:**


**“What is the role of community engagement and social practice for major infrastructure in supporting sustainable futures?”**



## About this document: Sparking debate and seeking your ideas

This document is intended to raise questions, spark debate, prompt ideas and create conversations. We encourage you to read it with critical curiosity, as you apply your own experiences and expertise to the issues presented.

Throughout the Situation Analysis watch out for two icons:



Wherever you see this icon, we are posing a question we believe is critical for research. Our question to you is: *Is this the best question? What else should we be asking?*



Wherever you see this icon, we are highlighting a critical point for discussion. What do you think of this issue? *Is it a critical point of tension? A lever for change? Or is there something else that is a priority?*

I2S uses 'co-design', a method of research design in which researchers work closely with key stakeholders from the earliest stages of the study. You are participating in co-design right now, by reading this document and offering feedback.

We need you to share your thoughts, challenges and creative ways forward in order to shape the research priorities for our second, five-year research agenda. You can contribute to the design of the research by:



Actively participating in **co-design activities** at I2S events and online fora.




Providing **written comment and feedback** via email: [research@nextgenengagement.org](mailto:research@nextgenengagement.org).



**Speaking individually** with I2S researchers to share your ideas. Our team's contact details appear on the back cover of this report and we welcome a conversation.



Participating in **I2S conference presentations and workshops**, including NCEIF (August 2023) and IAP2A (October 2023).



**Organising a bespoke session** for your organisation to contribute to the research co-design. Contact I2S directly for options.



Contributing to the **State of Infrastructure and Engagement Survey**: 

The remainder of this document introduces the **Six Emerging Themes** I2S pinpoints as vital to sustainable infrastructure futures: **Resilience, Social Value, A Fair and Just Transition, Social Inclusion, Cumulative Impacts and Wellbeing**. We derive these themes from our research to date and situate them within the Australian domestic and international infrastructure context. We offer brief definitions and pose critical questions for each theme in an effort to kindle the rigorous conversations necessary to create our next research agenda. This is an elemental step in I2S' commitment to providing the infrastructure sector with leading edge, social scientific research to support project delivery and societal benefits.

This document is both a summary of the clear evidence base I2S' work establishes for community engagement, social risk and social licence in major infrastructure *and* a provocation for new considerations, tougher questions and enterprising social practice. Throughout the pages that follow, we invite your critical curiosity, your personal and professional opinions and your constructive feedback. It is only through the involvement of the individuals, organisations and community members who shape and live with major infrastructure that we are able to deliver the insights we do.

**Professor Sara Bice**  
Director, Institute for Infrastructure in Society  
Crawford School of Public Policy  
The Australian National University



**Ms Kirsty O'Connell**  
Industry Director  
Institute for Infrastructure in Society





## The state of play

The global infrastructure need remains massive, estimated to reach US\$94 trillion by 2040.<sup>ii</sup> Governments are the main infrastructure funders in most major sectors,<sup>iii</sup> with global private investment just beginning to recover post-pandemic. Private infrastructure investments dominate renewable energy infrastructure, however, especially in developing economies, accounting for 95% and 85% of wind and solar investments, respectively.<sup>iv</sup> Throughout the world, investment gaps between the richest and poorest, urban and rural communities are increasing.

Infrastructure is progressively recognised as a major means of shoring up sustainable development and advancing climate adaptation. Complex project environments, and their consequences, are driving interest in the broader, cumulative effects of intensive infrastructure delivery. In Australia, 71% of Australia's urban population will be touched directly by the current \$300B pipeline. Almost all megaprojects (91%) have at least one other megaproject within 200km; 39% have at least one other within five kilometres.<sup>v</sup> Domestically and internationally, intensive project environments are heightening awareness of projects' impacts on First Nations and indigenous peoples and vulnerable groups, highlighting effects on social cohesion and inclusion, and opportunities to drive social value creation.

ESG (environmental, social and governance) concerns are experiencing a renaissance, especially on the international stage. Governments, intergovernmental agencies and multilateral development banks are promoting frameworks, goals and standards to structure investment attention and industry practice towards ESG concerns. Governmental examples include Australia's legislation of its 2050 net zero target, with expectations that mandatory climate risk disclosure will follow.<sup>vi</sup> Overseas examples include the European Sustainability Reporting Standards adopted by the European Commission in July 2023.<sup>vii</sup> The UN Sustainable Development Goals (SDGs) enshrine these concerns in Goal 9, 'Build resilient infrastructure, promote sustainable industrialization and foster innovation.'<sup>viii</sup> The World Bank's Environmental and Social Framework (ESF)<sup>ix</sup> and the OECD's Blue Dot Initiative (launched in March 2022)<sup>x</sup> both set investment criteria stretching beyond technical risk and defining holistic sustainability practice.

Together, these and other measures signal a shift in the infrastructure sector that demands fresh thinking and a reconfiguration of investment, selection and delivery priorities, and even the positioning of the sector itself. **The infrastructure sector is core to environmentally, financially and socially sustainable futures. The selection, planning and delivery decisions of today will influence generations to come.** This has always been the case for such a major industry with long time horizons. But today, our infrastructure choices have greater consequences than ever. This is where the next phase of I2S' research comes in.



## What is co-design?

Co-design is a process which brings together different stakeholder groups to design solutions to address a particular question or issue. Participants will work collaboratively to explore both the problem and the solution to develop ideas which are grounded in real-life experiences. For this co-design project, we are developing a research agenda to guide I2S' work from 2024 and beyond.



### I2S' Co-Design Principles

The co-design of I2S' next major research agenda is guided by the following principles:

**Genuine:** When undertaking research involving co-design and co-production, our commitment to involving non-university stakeholders as equal participants in the research lifecycle is genuine. We will work to the best of our ability to undertake research that meets our agreed principles.

**Inclusive:** Co-design and co-production processes aim to incorporate a variety of perspectives and experiences. Different types of knowledge are recognized (e.g. local, experiential, professional, scholarly, non-academic). 'Experts' are acknowledged as coming from diverse backgrounds and qualifications.

**Respectful:** The time, expertise and input of participants is valued. All participants are treated with respect and sensitivity to their particular situations and experiences.

**Meaningful:** The research design, activities, outputs and outcomes are generated in such a way that stakeholders substantially and substantively contribute to the entire research lifecycle. Opportunities for input and feedback are meaningful and robust, and are designed to promote the greatest degree of participation by all identified stakeholders.

**Reflective:** Research using co-design and co-production is iterative, adaptive and responsive. This means that research questions, plans and aims may change in response to participants' contributions and needs. The iterative nature of this type of research drives innovation and prizes creativity, reflective listening and shared learning. Reflection involves self-reflexivity, which may affect your own position or approach to the research, as much as adopting the research process itself.

**Outcomes-focused:** Research using co-design and co-production is outcomes-focused and aims to produce information, products, services or experiences that will effectively address the identified research problem and achieve 'real world' impacts. We are committed to supporting/facilitating the implementation/use of the information, products, policies or services created, beyond the usual close of the research project lifecycle.

As I2S moves into our next phase of work, it is critical that we continue to address government and industry's most important issues. The co-design of our next research agenda ensures that our research remains relevant and applicable. Our aim is to work with you to understand the priority issues that will shape a sustainable infrastructure future and identify the areas of concern in need of evidence and tools. Through our co-design process, together, we will shape a research agenda which can guide policy and practice for years to come.

Working with you, we aim to pinpoint and prosecute a research agenda that will empower government, industry and communities to make informed choices about very long term and highly consequential decisions. Whether we are in the most or least developed country, our roads, resources and even recreation are all shaped by high level and lasting decisions about the types of societies and communities we aim to construct.

We are especially concerned with how community engagement, social risk management and social practice (encompassing impact assessment, corporate stewardship and stakeholder engagement) will inform infrastructure futures. Our research clearly demonstrates that trust, and sound relationships based on high quality engagement, affect levels of community resilience and project acceptance.<sup>xi</sup> [Our research reveals that intensive project environments erode public trust in governments and cause citizens to question the overall planning for their communities.](#)<sup>xii</sup> [Project politicisation is further abrading public trust in infrastructure, in Australia and abroad.](#)<sup>xiii</sup> [Systematised social risk management and attention to social licence are imperative to infrastructure delivery.](#)

#### Six emerging issues

This Situation Analysis introduces six major themes that I2S believes must be addressed for infrastructure to facilitate sustainable futures. For each theme, we offer a short definition, outline key issues and present provocations, inviting you to engage, debate and improve these ideas to help form the questions that will drive useful research.

# Resilience

Resilience is an individual's, organisation's or community's capacity to maintain stability and wellbeing, and even to thrive amidst change, uncertainty, unpredictability or challenging events. Resilient infrastructure can adapt, absorb, recover and even prevent current and potential future hazards, including climate-related hazards, in a systemic way.<sup>xiv</sup>

## Emerging trends and issues

Resilient infrastructure is vital to meeting domestic and international infrastructure needs. It is also visibly critical to our capacity to live with contemporary disasters, including severe weather events, changing climates and pandemics. Infrastructure Australia's 'resilience principles' connect systemic infrastructure resilience directly with sustainability, wellbeing and economic safeguards.<sup>xv</sup> Like Infrastructure Australia, the OECD adopts a risk-based approach in which systematic regulation and processes support resilient infrastructure choices and maintenance.<sup>xvi</sup> The UN Principles for Resilient Infrastructure, meanwhile, establish guidelines for 'net resilience gain',<sup>xvii</sup> pointing out that the world's most climate-vulnerable communities are also the ones most in need of systemic approaches to deliver resilient infrastructure.

These considerations are important. **But resilience, when it comes to infrastructure, must reach beyond investments and assets to consider the capacities of local communities and societies to not only use but to benefit from infrastructure in ways that support adaptation, absorption and transformation.** Workforce resilience amongst those responsible for delivering the projects we need must also be considered. These are exceptional goals. What, specifically, do we need to know, in terms of data and evidence, in order to advance them?



## What do we need to know about resilience?

- How is the concept of resilience currently understood in the infrastructure sector? Is it about the assets themselves? About building infrastructure to support community and stakeholder resilience? Or resilience of the sector? Where are the major resilience gaps?
- What is the role and responsibility of the infrastructure sector in building and supporting resilient environments, workforces and communities?
- To what extent and in what ways could major infrastructure better support urgent action on climate change (both mitigation and adaptation)? How could infrastructure selection, planning and delivery be better integrated with disaster risk reduction and climate adaptation? How will today's projects affect future generations' capacities to respond to natural disasters and more frequent severe weather events, and to maintain the infrastructure we build?
- How can resilience be built into our infrastructure systems, in terms of redundancy and repair, but also how can infrastructure support societal resilience?
- What is the role of community engagement and social practice in informing and even leading these efforts? What organizational positioning, resourcing and support would be necessary to facilitate the role of social practice in enabling resilience?
- What policy, regulatory or practice changes would support better attention to resilience? How could this be monitored or assessed in intensive infrastructure environments?
- How do we meaningfully involve communities in framing what resilience looks like to them? Are there times when this is not appropriate? Who decides?

# Social Value

Social value encompasses the priorities and preferences that shape communities' wellbeing relative to environmental, financial and social sustainability. In other words, social value usually means the 'soft' outcomes that go beyond infrastructure's predominant function. Attention to social value aims to understand societal preferences and priorities and to take decisions that will deliver community benefits and mitigate negative impacts. Social value creation can occur through procurement processes, project selection, prioritisation of 'co-benefits' and ultimately, via project delivery.

## Emerging trends and issues

Infrastructure projects are traditionally assessed in relation to their ability to address known problems, including traffic congestion, flooding, ageing energy infrastructure, underperforming hospitals or social housing shortages. When social value creation is considered, problems are assessed more broadly, placing the wellbeing of communities and the environment at the centre of project decision-making. In the UK, for example, the Public Services (Social Value) Act 2012, requires social value creation be explicitly considered in public procurement processes.<sup>xviii</sup> Closer to home, state governments, including Victoria,<sup>xix</sup> have introduced social procurement frameworks, and private sector organisations, including Transurban, commit to social procurement in their supply chains. Social value creation is also being pursued beyond that delivered directly through project delivery, as in the case of Lendlease's social value target,<sup>xx</sup> advanced through community partnerships.

While the extension beyond the usual considerations of cost, time and quality is laudable, there is no agreement about the best way to quantify and assess social value. Policymakers face challenging questions about how to adapt policy and decision-making frameworks to include or prioritise social value creation. There are also questions about the best way to engage communities about social value and integrate their voices early in decision-making. **The infrastructure sector must become better able to demonstrate the social value it is delivering, especially where public money is invested.** This vital improvement could support planning and design changes, regulatory reform, and decision-making practices to allocate resources in ways that maximise benefits and return on investment in Australia and globally.



## What do we need to know about social value?

- When we talk about 'social value' in relation to infrastructure, what do we really mean? How is social value defined and understood in the sector? What, specifically, is being generated when we talk about 'social value creation'?
- How important is it to measure social value creation? What are the most rigorous, meaningful and replicable ways to do this? How important is it to be able to pinpoint certain social value creation to a particular infrastructure project?
- What is the role of policymaking, legislation or regulation in social value delivery from infrastructure? How can policies be structured to compel social value creation from public infrastructure investment? How can the social value proposition of infrastructure be maximized?
- Who defines what constitutes social value? How can we ensure that the voices of vulnerable, minority, indigenous or marginalized groups are heard when it comes to what constitutes social value? At what point in the project lifecycle do community members need to be engaged to inform social value creation?

# A fair and just transition

A fair and just transition refers not only to our transition to renewable energy sources but also to a broader transformation in which net zero is achieved and where societies collectively adapt to and benefit from environmental, social and economic changes that will preserve our planet for many generations to come. A fair and just transition will ensure the steps taken to achieve net zero account for socio-economic, resource access and developmental differences within and between societies. [A fair and just transition prioritises social equity through processes involving procedural fairness \(decision-making processes are transparent, accessible and seen as fair\) and distributive justice \(costs and benefits of activities are spread evenly across societies\).](#)

## Emerging trends and issues

Transitioning to net zero is one of the greatest global challenges facing humankind today. The transition will require decarbonising the infrastructure systems essential to our modern way of life. From replacing fossil fuels with renewable energy sources, to ensuring that new and existing infrastructure is retrofitted to sustainable standards, the task is formidable.

Research in Australia and internationally demonstrates that a social licence for the transition cannot be taken for granted.<sup>xxi</sup> Paradigm-shifting changes, including the phase-out of local fossil fuels industries, local employment alterations, concerns about new or unfamiliar technologies, and many of the usual social risks that come alongside major infrastructure projects all apply in the energy transition. [This means that community engagement and social practice is critical to a fair and just transition.](#) Stories are emerging from across the sector of situations in which community acceptance of the energy transition (and its related infrastructure) is taken for granted, meaning that engagement, fair participation and the relationship-building necessary to good project outcomes is neglected. Such practices pose threats not only to the local communities who deserve a genuine voice in the transformation, but to our global collective.



## What do we need to know about a fair and just transition?

- What does community engagement for a fair and just transition look like? How can it be encouraged, especially where governments may be pushing ahead?
- How can we leverage the best renewable energy technologies of today while readily accommodating technologies that have yet to be invented? Is current analysis adequately considering potential ‘disbenefits’ (e.g. potential hydropower effects on dams and weirs)? What trade-offs are required of communities for the transition?
- Are we adequately balancing local and state/national/international needs in the transition? What would help us do this better? How could this be achieved? What role does policymaking or private sector governance have to play in this balancing act?
- What happens when community acceptance of the transition is taken for granted? How can social practice lessons learned from other sectors be better applied to support a fair and just transition and social licence for the sector?
- How does a fair and just transition focused primarily on the energy sector affect other infrastructure sectors? In what ways can/should all infrastructure sectors adopt commitment to a fair and just transition? What would that look like? What would it achieve?



# Social inclusion

Social inclusion is about ensuring that all groups and individuals in a society have equal opportunities for socio-economic participation and development. Social inclusion is often defined differently depending on the context in which it is used. In organisations, we talk about gender equity, diversity and inclusion. When we think about urban planning, social inclusion is often used to guide decisions about social housing and equal access to amenities and affordable services. In developing country contexts, social inclusion links closely to capacity building to improve ‘the ability, opportunity, and dignity of people, disadvantaged on the basis of their identity, to take part in society’.<sup>xxii</sup> For infrastructure, this means that all individuals, groups, and communities benefit from investments and improvements.<sup>xxiii</sup>

## Emerging trends and issues

Concerns for social inclusion in Australia relate strongly to our urbanisation and the growing cultural diversity of our cities and major regions. As of 2022, 86% of Australia’s population qualified as urban according to the World Bank,<sup>xxiv</sup> with an internationally unique make-up in terms of population composition and the consequent ways that our cultural diversity characterises all cities and many regional towns.<sup>xxv</sup> Social cohesion and inclusion are vital to thriving communities, with extensive research demonstrating that social exclusion informs lower wages and lifetime earnings, poorer health outcomes, economic disadvantage, worse mental health and economically detrimental labour force outcomes.

Domestic and international treasuries are progressively prizing and integrating social inclusion as a key budget principle. New Zealand leads in wellbeing budgets alongside Canada, Finland, Iceland, Scotland and Wales, while Australia’s recent *Intergenerational Report* directly links government investments in infrastructure with facilitating social cohesion and inclusion.<sup>xxvi</sup> Explicit concern for social inclusion by governments informs more equitable institutions, promotes trust in government and improves accountability. For the infrastructure sector, social inclusion provides a clear focus on the ways that projects can reduce poverty and inequality and deliver fairer outcomes. This might occur through the activities of empowered, arms-length infrastructure bodies, reducing the politicisation that undermines public trust in infrastructure, or through ensuring that disadvantaged communities are not made worse-off relative to more advantaged communities (e.g. by increasing costs of living, intensifying urban-rural disparities or exacerbating unequal access to quality infrastructure).



## What do we need to know about social inclusion?

- How is ‘social inclusion’ understood in the infrastructure sector? When we talk about ‘social inclusion’, are we all talking about the same thing? What does it involve?
- When we talk about organisations and roles within the sector, how is social inclusion understood?
- In relation to community engagement, in particular, how does the widespread feminization of the discipline affect its power and legitimacy in the hierarchy of infrastructure disciplines? (How) would focusing on social inclusion in other sector disciplines improve the opportunities and experiences for social practice professionals?
- Are new modes of digital engagement supporting social inclusion? Do we have the data to answer this question or understand why some groups may be advantaged or disadvantaged by different modes of engagement?
- When it comes to selection, which projects/types of projects will best accommodate changing populations with characteristics of increased size, density and diversity? How can this be done fairly, equitably and inclusively?

# Cumulative impacts

Cumulative impacts are the result of incremental, sustained and combined effects of multiple projects in an area, and the accumulation of effects from past, current and future activities as they arise. Impacts including: dust, noise, changes to the amount of greenspace, changes to community identity, disruptions or changes to traffic and parking, changes to demographic make-up, changes in access to services, amenities or culturally significant sites, and changes in geographic connectivity are some common examples of cumulative impacts arising from infrastructure development. In order to identify and understand cumulative impacts, it is best to consider them from the perspective of a person living or working in that place, known as a place-based approach.

## Emerging trends and issues

Australian communities are experiencing an unprecedented scale and pace of project delivery with governments planning and delivering a \$300B infrastructure pipeline. In the next five years alone, some 434 projects will be delivered, valued at \$218B.<sup>xxvii</sup> As the extent and intensity of Australia's Big Build picks up, so too do cumulative impacts on communities, particularly on the East Coast which accounts for 87% of the major public infrastructure pipeline over the next five years.<sup>xxviii</sup> This same intensity is reflected internationally, visible in worldwide infrastructure spending figures. Estimates suggest a total, world-wide infrastructure spend of US\$9 trillion by 2025, up from US\$4 trillion in 2012. Here, cumulative impacts are writ large.<sup>xxix</sup>

Cumulative impacts are especially challenging because the approvals, management and impact assessment regimes in place to govern projects are traditionally administered on a project-by-project basis. Transnational infrastructure drives, including China's Belt and Road Initiative and the US-led Partnership for Global Infrastructure illustrate the transnational governance challenges of intensive, global project environments. Cumulative impacts also arise where various developing industries interact (e.g. mining, forestry, wind farms). Such interactions can be particularly disruptive for local communities or indigenous populations. Experiences including the indigenous Sami people of Sweden, Norway, Finland and Russia with encroaching industries or the tensions between farmers, winemakers and thoroughbred horse breeders with the mining industry in Australia's Upper Hunter Valley illustrate common shortcomings of policy and regulation in dealing effectively with cumulative impacts



## What do we need to know about cumulative impacts?

- How are cumulative impacts currently understood and dealt with in the infrastructure sector? What are the specific barriers to more place-based approaches sector professionals say are needed?
- What policy, legislative or regulatory changes are required to shift from project-by-project appraisals to ones that more readily accommodate cumulative impacts? Where cumulative impacts are formally acknowledged and governed, what processes should be in place to determine responsibility and accountability?
- What participative, collaborative or genuine community engagement processes could support better attention to cumulative effects? How can community members be empowered to demand and support more place-based infrastructure?
- Given that organisations primarily take on project-specific risk responsibilities, what could be an effective process to articulate cumulative impacts, assign or share responsibility and effect change? What would it take to get industry and government buy-in for better cumulative impacts management?
- What is the role of community engagement in supporting place-based infrastructure? How does staff turnover, especially in social practice roles, add to the challenge of tracking cumulative impacts?

# Wellbeing

Wellbeing captures the components of a human life, lived well. From good health to positive relationships, economic opportunities to a sense of collective belonging, wellbeing encapsulates the multi-dimensional factors that, together, allow individuals and societies to flourish.<sup>xxx</sup> While an overarching wellbeing is desirable, wellbeing can also refer to different aspects of our lives. Workplace or school wellbeing, personal wellbeing, relationship wellbeing—all of these dimensions offer their own specific opportunities and challenges, defined by diverse features. Workplace or school wellbeing, for instance might be characterised primarily by a safe environment, free from discrimination and with equal access to resources and opportunities for accomplishment. Personal wellbeing might be defined by positive emotions, a sense of autonomy and purpose, pleasure and social engagement.<sup>xxxi</sup>

## Emerging trends and issues

Wellbeing intuitively connects to all of the preceding themes. In many ways, it may be the ultimate aim or outcome of positive efforts involving resilience, social value, a fair and just transition, social inclusion and place-based infrastructure approaches. It also provides an important means of considering the various aspects of the infrastructure sector in which wellbeing matters. In its recent *Delivering Outcomes* report, for instance, Infrastructure Australia notes that the national infrastructure sector falls short on employee wellbeing and needs better attention to equity, diversity and inclusion alongside health and safety outcomes.<sup>xxxii</sup> The need for improved attention to wellbeing, especially among social practice professionals is visible in the National Community Engagement for Infrastructure Forum's recent launch of its wellbeing arm. Internationally, construction workforces are recognised as among the most stressed of any profession.

Community wellbeing is also informed by the infrastructure sector. Our research demonstrates direct connections between community members' perceived project benefits and relationship quality, trust and levels of resilience—all factors that contribute to overall wellbeing.<sup>xxxiii</sup> In the UK, the National Infrastructure Commission's work on the Quality of Life Initiative illustrates direct connections between sustainable infrastructure and wellbeing. At a broader international level, the World Bank notes that infrastructure disruptions notably affect the health and wellbeing of households.<sup>xxxiv</sup>



## What do we need to know about wellbeing?

- How is wellbeing defined and understood in the infrastructure sector? What types of wellbeing are most important, relative to infrastructure (e.g., work or school, personal, community, relationships)?
- What principles or processes could guide better attention to wellbeing in the sector? How could infrastructure sector organisations improve the wellbeing of their employees, individually and collectively? Do some organisations do better at this than others? Why?
- For social practice professions, how does the usual hierarchy of expertise, which usually prizes 'technical' disciplines over social and engagement experts, affect wellbeing? In what ways do common situations involving lower status, lower pay and more limited career progression affect the wellbeing of social practice professionals? (How) is this linked to the widespread feminization of these disciplines? And what are the implications for women's wellbeing, in particular?
- Where staff turnover is common, what are the impacts on engagement professionals in relation to retention and performance? For other disciplines?
- How is wellbeing considered in social value assessments? What could enable better consideration?
- How could integration of the six themes outlined here support improved wellbeing outcomes across the infrastructure sector for a wide variety of individuals and groups, from employees to communities?

# Contact

Want to join the I2S community of industry leaders, practice professionals and research experts working to improve community experiences of major infrastructure projects? We'd love to hear from you.

Found this *Situation Analysis* interesting or helpful? Let us know what you think.

## Industry partnership enquiries:

Kirsty O'Connell, I2S Industry Director

kirsty[[@](mailto:kirsty@engagementpeople.com.au)]engagementpeople.com.au

## Research or report enquiries:

Sara Bice, I2S Director

sara.bice[[@](mailto:sara.bice@anu.edu.au)]anu.edu.au

Check out our website for more info: [www.nextgenengagement.org](http://www.nextgenengagement.org)

## Endnotes

<sup>i</sup>Bice, S., Neely, K. and Einfeld, C., 2019. Next generation engagement: Setting a research agenda for community engagement in Australia's infrastructure sector. *Australian Journal of Public Administration*, 78(2), pp.290-310.

<sup>ii</sup>GIHub, 2018. *Global Infrastructure Outlook*.

<sup>iii</sup>Yu, K., 2023. Meeting a challenge: using government budgets to estimate annual public investment priorities in infrastructure. Sydney: GIHub.

<sup>iv</sup>World Bank, 2017. Who sponsors infrastructure projects?

<sup>v</sup>Infrastructure Australia, 2021. A National Study of Infrastructure Risk.

<sup>vi</sup>Longo, J., 2023. ESG: Major change is underway and we need to be ready. ASIC at Committee for Economic Development of Australia, 13 June.

<sup>vii</sup>Directorate-General for Financial Stability, Financial Services and Capital Markets Union, 2023. The Commission adopts the European Sustainability Reporting Standards, 31 July.

<sup>viii</sup>UN Sustainable Development Goals, Goal 9.

<sup>ix</sup>World Bank, 2018. Environmental and Social Framework.

<sup>x</sup>OECD and the Blue Dot Network, 2022.

<sup>xi</sup>Sabit Otor, Sara Bice and Kirsty Jones, 2022. Why Community Engagement Matters: Community Resilience and Acceptance in Major Projects. Canberra: Institute for Infrastructure in Society, The Australian National University.

<sup>xii</sup>Sara Bice, Kieren Moffat, Hayley Henderson and Sean Murphy, 2022. Australian Perspectives on Infrastructure: Local Surveys: Highlights Report. Canberra: Institute for Infrastructure in Society, The Australian National University.

<sup>xiii</sup>Emerson Sanchez, Sara Bice and Kirsty O'Connell, 2023. State of Infrastructure and Engagement: Highlights Report: 2021-2022. Canberra: Institute for Infrastructure in Society, The Australian National University.

<sup>xiv</sup>UNDRR, 2022. Principles for resilient infrastructure.

<sup>xv</sup>Infrastructure Australia, 2022. Resilience Principles.

<sup>xvi</sup>OECD, 2021. Building Resilience.

<sup>xvii</sup>UNDRR, 2022.

<sup>xviii</sup>Watts, G., Higham, A. and Abowen-Dake, R., 2021, November. The effective creation of social value in infrastructure delivery. In *Proceedings of the Institution of Civil Engineers-Engineering Sustainability* (Vol. 175, No. 4, pp. 167-174). Thomas Telford Ltd.

<sup>xix</sup>Victoria's Big Build, nd. Social Procurement.

<sup>xx</sup>Lendlease, nd. Social Value Target.

<sup>xxi</sup>Colvin, R.M. and Przybyszewski, E., 2022. Local residents' policy preferences in an energy contested region—The Upper Hunter, Australia. *Energy Policy*, 162, p.112776.; MacNeil, R. and Beauman, M., 2022. Understanding resistance to just transition ideas in Australian coal communities. *Environmental Innovation and Societal Transitions*, 43, pp.118-126.; Mejia-Montero, A., Alonso-Serna, L. and Altamirano-Allende, C., 2020. The role of social resistance in shaping energy transition policy in Mexico: The case of wind power in Oaxaca. In *The regulation and policy of Latin American energy transitions* (pp. 303-318). Elsevier.; Newell, P., 2021. Race and the politics of energy transitions. *Energy Research & Social Science*, 71, p.101839.

<sup>xxii</sup>World Bank, 2013, cited in Barron, P. et al, 2023, Social Sustainability in Development, p.37.

<sup>xxiii</sup>GIHub, nd. Inclusive Infrastructure and Social Equity.

<sup>xxiv</sup>World Bank, nd. Urban Population: Australia.

<sup>xxv</sup>Henderson, H., Sullivan, H. and Gleeson, B., 2020. Variations on a collaborative theme: Conservatism, pluralism, and place-based urban policy in Central Dandenong, Melbourne. *Journal of Urban Affairs*, 42(1), pp.125-142.

<sup>xxvi</sup>Australian Government Treasury, 2023. Intergenerational Report.

<sup>xxvii</sup>Infrastructure Australia, 2021.

<sup>xxviii</sup>ibid.

<sup>xxix</sup>Oxford Economics, 2014. Capital project and infrastructure spending: Outlook to 2025.

<sup>xxx</sup>Huppert, F.A. and So, T.T., 2013. Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social indicators research*, 110, pp.837-861.

<sup>xxxi</sup>Seligman, M.E., 2011. *Flourish: A visionary new understanding of happiness and well-being*. Simon and Schuster.

<sup>xxxii</sup>Infrastructure Australia, 2022. People Wellbeing and Resilience: Delivering Outcomes.

<sup>xxxiii</sup>Otor et al, 2022.

<sup>xxxiv</sup>Hallegatte, S. et al, 2019. Infrastructure Disruptions Affect the Health and Well-being of Households. *Lifelines*.