

New Zealand Draft Infrastructure Strategy Consultation Submission

IPWEA NZ

Introduction

The Institute of Public Works Engineering Australasia New Zealand Division Inc (IPWEA NZ) welcomes the opportunity to respond to the draft New Zealand Infrastructure Strategy. In addition to the online response we also provide the following background to our organisation and provide further commentary in support of our submission.

About IPWEA NZ

IPWEA NZ is a peak not-for-profit association covering essential public works and services delivered by local, and central, tiers of government. Across Australasia, the wider organisation represents more than 4,750 members, with over 900 responsible for the operations and management of infrastructure throughout New Zealand. IPWEA's online community numbers in excess of 30,000 registered users.

IPWEA NZ is part of a federation that encompasses six Australian Divisions, and NAMS Canada. The organisation, in conjunction with global public works partners in North America and Europe, is focused on the benefits of applying a systems approach to infrastructure planning, delivery and management.

IPWEA NZ represents local government engineering alongside the broader public works sector and its private sector stakeholder. Almost all New Zealand's professional consultancy firms that specialise in public sector infrastructure – including roads, water, power, rail, ports and airports – have managers and staff who are members of IPWEA. Core infrastructure managed by our members includes community/public facilities, waterways, ports, road and rail transportation, water supply, wastewater and stormwater services, and flood and coastal protection.

To provide some context, the asset base our members have oversight for within Local Government includes 90% of the national roading network. These roads cover the length and breadth of New Zealand, carrying a traffic volume equal to the State Highway network (MoT, 2019-2020). The Three Waters infrastructure our members manage has an asset value of \$85B, servicing a connected population of 4.4M people (WICS, RFI Table J1). The vast range of network, community facilities, and other assets that our members manage on our behalf are essential in ensuring the wellbeing of every New Zealander, both now and into the future.

Why are we commenting?

IPWEA NZ is an industry leader in infrastructure planning, delivery and operation and therefore has a key stake in the New Zealand Infrastructure Strategy. Through our published¹ International Infrastructure Management Manual (IIMM) - utilised by all of New Zealand's 67 Territorial Local Authorities, National Agencies, and throughout Australia, the Pacific and in North America - we have developed and continue to regularly evolve international best practice asset management.

The IIMM includes updates to the ISO 55000 Asset Management Standards. Recognising that the ISO Standards are very much the "What to do", the IIMM provides the "How to do it" in terms of applying the gold standard for infrastructure asset management. The IIMM provides valuable learnings for those who have a vital stewardship role in managing the investment in infrastructure on behalf of their communities, customers and strategic stakeholders.

IPWEA also make the NAMS+² system available to members, on a subscription basis. Based on the IIMM - and aligned with ISO Standards - it allows the user to build real-time models for Asset Management Plans. NAMS+ provides the tools to simplify asset management planning and takes the complexity out of reporting on asset lifecycles, ensuring both performance and whole-of-life costs are optimised. The tools ensure that asset management planning is consistent across asset portfolios, allowing ready comparisons and prioritisation.

Further commentary supporting our online submissions

Critical Competencies

Asset management discipline, competencies and capacity are critical to the successful implementation of the New Zealand Infrastructure Strategy. A professional understanding of infrastructure asset management planning and life cycles, levels of service and community expectations, alongside funding availability and risk are enablers to realising strategic intent.

Ensuring that suitably skilled professionals are supported across all aspects of asset management through quality education, and training will enable much of the vision captured in the Strategy to be realised. Equally, those in governance, executive and similar decision-making roles must have the necessary knowledge to interpret and interrogate asset management plans presented to them for consideration.

IPWEA NZ is well placed to support the upskilling of decision makers, as well as to support the continuing professional development of asset managers tasked with implementing all aspects of the New Zealand Infrastructure Strategy.

¹ <https://www.ipwea.org/newzealand/bookshop/nzpubs/nzbookshop/iimm2020>

² <https://www.ipwea.org/communities/am/namsplus>

Opportunities and Challenges

We acknowledge the 2020 and early 2021 “State of Play” reports in the telecommunications, energy, waste and resource recovery, water, transport and social infrastructure sectors. We believe these describe the current state of the sectors and the issues they face, as well as those they need to prepare for. We have responded to the consultation document including the 36 questions where they relate to our expertise – as submitted online.

Our response to the opportunities and challenges we face can be summarised as follows:

1. Ensure that asset management, and financial planning and reporting frameworks are implemented and maintained in a credible, consistent, and scalable system across all levels of Government.
2. Audit long-term financial plans so that they account for the service, cost and risk forecasts and trade-offs reported in the associated Asset Management Plan.
3. Account for rural and urban differences in population, climate, topography, means/ability to pay through robust Asset Management Planning.
4. Provide for a clear focus on integration of Te Tiriti O Waitangi, Te Mana O Te Wai requirements and principles into asset management.
5. Recognise and embed demographic and cultural diversity in the Infrastructure Strategy, particularly the expectations and demands it brings for the next 30 years and beyond.

Experience has shown that with the right legislative framework, supportive guidance, and co-ordinated delivery programmes, significant improvement in the performance and management of infrastructure is possible. Importantly, additional investment may not necessarily be required in all instances.

Strategic intent alignment

The Strategy’s stated intent is to ensure investment in infrastructure delivers what we need, where we need it, and when it is required.

The goal of asset management as stated in IPWEA’s IIMM is to “meet a required level of service, in the most cost-effective manner, through the management of assets for present and future customers”. This goal is well aligned with the Strategy’s intent.

The Lifecycle Value Chain



The Strategy notes five infrastructure value chain components. Given the long lifespan of some infrastructure, beyond the Strategy’s 30 year horizon, it is crucial that effective management of infrastructure assets is executed well. Understanding and delivering lifecycle asset management is core to achieving this. IPWEA NZ defines asset management as:

“...the systematic and coordinated activities and practices of an organisation to optimally and sustainably deliver on its objectives through the cost-effective lifecycle management of assets.

The IPWEA asset management lifecycle aligns with and supports the core value chain components identified in the Strategy as follows:

NZ Infrastructure Strategy Value Chain Component	IPWEA Lifecycle Asset Management Alignment
Policy	Requirements Definition (Need):
Regulation	Legislative and regulatory requirements, strategic and business goals, levels of service requirements (current, future)
Planning	Asset Planning: Confirming the service required from the customer, and the most effective solution to meet the need
Investment	Asset Creation/Acquisition: Provision of or improvement to an asset, benefits extend beyond the year of outlay
Procurement	
Not specifically stated as a value chain component	Asset Operations and Maintenance Asset Monitoring Asset Condition/Performance Asset Rehabilitation/Replacement Asset Disposal/Rationalisation

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Four well-beings

It is noted that in delivering against the Strategy's intent, support of the four well-beings – environmental, social, cultural and economic - should be embedded.

IPWEA and its members, working under the Local Government Act 2002 and Local Government Amendment (Community Wellbeings) Act 2019, Resource Management Act 1991, Land Transport Management Amendment Act 2013 and many other strategies, regulations, policies, standards, and guidelines, have a sharp day-day focus on ensuring these four wellbeing requirements are achieved within their means.

IPWEA NZ supports this focus as being a foundation for achieving balance between competing priorities that is aimed at improving well-being in all its forms for all New Zealanders.

Four Capitals

The Strategy notes four capitals: natural, human, social, and physical /financial and that these are "central and sacred ingredients to the process of delivering infrastructure.

Of particular concern to IPWEA NZ is the impact of human capital on our ability to successfully implement a 30 year Infrastructure Strategy. There is a significant skills shortage that we have signalled for some years to support delivery of quality asset management practice across the infrastructure sector.

Upskilling infrastructure asset owners and all related stakeholders in the deployment of best practice asset management principles, practices and experience will be critical to the overall success of the Infrastructure Strategy. Decision making guides and tools, asset management planning disciplines and templates are all available but require knowledgeable experienced professionals to apply to ensure consistently optimal long-term outcomes.

Further discussion

IPWEA has the national coverage, technical expertise, education and training programmes, and sector engagement needed to assist with the recommendations outlined.

Should you have any queries regarding our submission please contact Chief Executive [REDACTED] [REDACTED] for further discussion.