He Tūāpapa ki te Ora Infrastructure for a Better Future

Proposed vision for infrastructure 2050

Te tirohanga marohi mō te hanganga 2050

Vision for 2050

Infrastructure equitably supports the wellbeing of the people of Aotearoa.

Mission

Mentor the option selection and detailing of proposals to assure that:

- Uncertainties have been considered and risked and
- Collaboration with stakeholders is complete.

Goals

Infrastructure supports people's wellbeing

- Value: Rank new and existing options for sustainable outcomes (economic, fiscal, social, environmental, cultural).
- Equitability: Understanding of societal needs and wants, especially those of the vulnerable and disadvantaged.
- Future focus: Scenario planning to build in adaptability of options to change (e.g. climate and global politics).

The decision process shall be collaborative across racial, cultural and treaty demands. It shall be transparent, integrated across systems/networks and evidence-based on the most accurate/benchmarked costs, benefits and impacts.

Simplicity

The framing of the *Infrastructure for a Better Future* consultation document is extremely complicated.

The governing document *Infrastructure Project Governance Guidelines* is equally obtuse.

Conclusion: Concentrating on simplicity of purpose and delivery allows understanding of goals and give us the best chance to achieve them in tandem with a quality assurance focus.

Virtuous Spiral

Best value and equitable result



Reliability





Environment effect





Avoid Bureaucracy, Minimise Cost



Competence and Testing Assurance

An allianced team (Te Papa model) to establish infrastructure improvement concepts and then select project scopes based on need and value (ROI and cultural).

Competence assurance and training in the areas of community aspirations, prequalification of contractors and suppliers, contract development and insurance and understanding of uncertainties.

The planning and competence efforts allow:

- Intimate contingency planning.
- Testing and validation of design.
- Experienced overview and review prior to progression to commitments,
- Reduction in schedule holds for rework and governance decisions.
- Relaxed integrated team effort.
- Insights for post-handover troubleshooting.

Minimum Quality Standards

Proactive adoption of standards to allow:

- Prequalification of contractors and vendors.
- Minimised materials parts count.
- Vendor standards to avoid prototypes.
- Materials selected to minimise maintenance.
- Vendor liaison on equipment/component reliability to remove latent defects.
- Design codes, standards, specifications and practices to be agreed.

Team Integration

All aspects of each infrastructure project will integrate (management and contractors) in the same office or virtually to assure communication, avoid data assumptions, standards and approvals processes:

- Community: Treaty imperatives
- Governance and Standards control
- Engineering
- Construction
- Quality Assurance and Control
- Health/Safety/Environment & Risk (Uncertainty) management
- Contracts/Procurement/Logistics
- Cost control/Economics
- Finance
- Project Management