





## Better Scenario Planning for large-scale transport programmes

Session Stream: Economics & Funding

**Preferred Presentation Format:** Oral

**Presenter:** Cameron Stanley (Open Plan)

**Abstract:** 

Getting true data-driven planning into large-scale and long-term infrastructure programmes can increase the likelihood of capital investments achieving their desired outcomes and getting the best value for money. However, it is challenging to factor in the many social benefits and outputs alongside financial permutations of such large programmes without advanced analysis tools.

In this presentation, Cameron Stanley, who led the development of a Scenario Planning Tool for NZTA's 2020-2024 Speed and Infrastructure Programme (SIP) will share valuable insights from this project as a case study. Cameron will walk through how the tool works and how it helped the SIP programme drive more data-led decision-making, factoring in many different scenarios and testing 'what-ifs.' These included varying project priorities, programme targets, funding levels, and delivery rates to assess the potential impact on the programme. An optimal programme could then be selected by comparing these different scenarios and selecting the best outcomes for the funding and resources available.

The Scenario Planning Tool has potential to improve investment outcomes from future infrastructure programmes in New Zealand as a more holistic complement to pure financial modelling tools or project benefit cost ratios. While this tool was used for new infrastructure work, it could also be applied to asset management and maintenance, allowing us to better work with what we have – both from an infrastructure and financial point of view.