

Demystifying new mid-tier transit technologies

AITPM theme: Emerging Transport Technologies to Achieve Zero Emissions

Abstract summary:

Emerging 'Zero Emissions' vehicle technologies like the Brisbane Metro and Trackless Tram when coupled with appropriate infrastructure and operational plans, are presenting opportunities for new and reimagined mid-tier rapid transport systems.

These Mid-tier transit systems are aimed at 'closing the gap' between traditional bus and 'mass transit' modes, in a more flexible and cost effective way, while helping to meet urban accessibility challenges and achieve Zero Emissions goals.

In this presentation, Tim will help demystify these new technologies, drawing from Jacobs' projects across Australasia.

Full abstract:

Australasian cities are suffering from strong population growth, worsening urban congestion and diminishing housing affordability. Coupled with an increasingly constrained fiscal environment and the need to move towards a Zero Emissions transport future, Governments and their transport agencies need to find innovative ways to affordably encourage mode shift towards more sustainable modes. Emerging 'Zero Emissions' vehicle technologies like the Brisbane Metro and Trackless Tram when coupled with appropriate infrastructure and operational plans, are presenting opportunities for new and reimagined mid-tier rapid transport systems.

Mid-tier transit systems are aimed at 'closing the gap' between traditional bus and 'mass transit' modes, like metro or passenger rail systems, offering rail-like system quality, with right-sized vehicles, customer focussed network and services while minimising the extent of fixed infrastructure. When planned, designed and deployed in the right way, mid tier transit can play a pivotal role in helping to meet urban accessibility challenges and achieve Zero Emissions goals, in a more flexible and cost effective way. For example, in Brisbane's case, adopting a Battery Electric rubber tyred-Mid-Tier transit solution within a largely pre-existing busway network was proven to be cheaper and more readily deployable than alternative rail-based options.

In this presentation, Jacobs will demystify these new technologies, outline their role and value in the public transport network and share learnings from the implementation of these systems, drawing from Jacobs' projects such as our role as Technical Advisor to Brisbane Metro and the Sunshine Coast Public Transport project, as well as other projects across Australasia.

Presenter name and bio:

Tim Wedmaier is a principal transport planner at Jacobs with 23 years of experience in multi-modal transport planning in Australia, New Zealand, and the UK, specialising in the development of public transport solutions. With a background and qualifications in urban planning, Tim is highly adept at identifying, breaking down and analysing complex urban transport and land use problems. His strength is in problem solving for clients through a focus on evidence gathering, challenging the norm, then building consensus between client and stakeholders. Tim's experience covers the various stages of public transport project development from strategic and network planning to concept design and business case development to providing operational inputs to detailed design.