

Identification, Evaluation and Appraisal of Factors which Influence Demand for Urban Rail Services & Investigating which Factors may be Influenced to Balance Demand & Capacity to Improve Efficiency & Enable Cost Effective Service Provision (R1.107)

Background

Urban rail systems in the larger Australian capital cities have significant demand variability, with morning and evening peak demand in many cases stressing system capacity and adversely impacting service levels and traveller satisfaction. Urban rail authorities in most Australian capital cities already employ elements of demand management, both via differential pricing and administrative techniques. However current demand balancing approaches may reflect historical practice and past priorities rather than a systematic measured approach to achieving current system management objectives. Improvements in demand management hence have the potential to deliver improved rail systems budgetary outcomes and assist in addressing environmental and social objectives.

Objective

The project will identify, evaluate and appraise factors which influence demand for urban rail services. It will also investigate ways in which these factors may be influenced to balance demand and capacity of urban rail to improve efficiency and enable cost effective provision of services.

Outcomes

The project is a priority for the rail industry because of its potential to enable better utilisation of rail infrastructure, improved service levels for urban commuters, and enhanced financial viability and budget outcomes of urban rail organisations. In addition, application of the management tools developed from the project have the potential to deliver social and environmental dividends in the areas of energy use, carbon impact, reduced congestion, trip times, and access to recreational amenities.

Benefits

The potential benefits of this research include being able to provide urban rail organisations with the tools to

- better balance demand with capacity,
- better understand the latent or additional demand that could be serviced with appropriate changes to service characteristics,
- promote better utilisation of current rail infrastructure, rolling stock and services,
- improve service levels for urban commuters,
- achieve social and environmental dividends in the areas of energy use, carbon impact, reduced congestion, trip times, work-life balance and access to recreational amenities, and to
- reduce pressure on other transport infrastructure and enhance financial viability and budget outcomes for urban rail organisations.

Project timeframe

1 March 2009 to 31 August 2010