

# Brisbane Rail Services and Infrastructure Requirements Study

## NETWORK:

Brisbane metropolitan network

## CLIENT:

Translink Queensland Transport

## DATE:

October 2006 to June 2007

Translink, a division of Queensland Transport, engaged Systemwide to provide a comprehensive future service plan and infrastructure and rollingstock investment plan for the Brisbane rail network through to 2016.

## The Challenge

South East Queensland is currently one of the fastest growing regions in Australia. This dramatic growth in population has placed considerable strain on the transport system. The Queensland State Government responded with increased funding for transportation projects and created the South East Queensland Infrastructure Plan and Program 2006-2026 (SEQIPP). SEQIPP is a \$66 billion blueprint for infrastructure investment over the next 20 years—see [www.qr.com.au/seqip](http://www.qr.com.au/seqip)

As part of SEQIPP, Translink is developing a 10 year public transport network strategy. Systemwide was engaged by Translink to conduct the Rail Services and Infrastructure Requirements Study, which is a key input to the overall strategy. The goal of the study is to provide recommendations on what services to run in the future and to use this to recommend infrastructure upgrades and additional rolling stock.

## Our Approach

As a first step, Systemwide devised a number of possible service plans that could cater for patronage forecasts, government policies and service commitments.

The efficiency of these service plans was then tested using Systemwide's 'Train Load Predictor'. This tool estimates the number of passengers on each train for a given timetable. It ensures resources are optimised and seeks to avoid under and over crowding scenarios.

The service plans were then developed into strategic level operating plans to determine the rolling stock and infrastructure implications of each plan.

## The Benefits

Systemwide's insight provided TransLink with the information to build a strategic plan for the next 10 years, including:

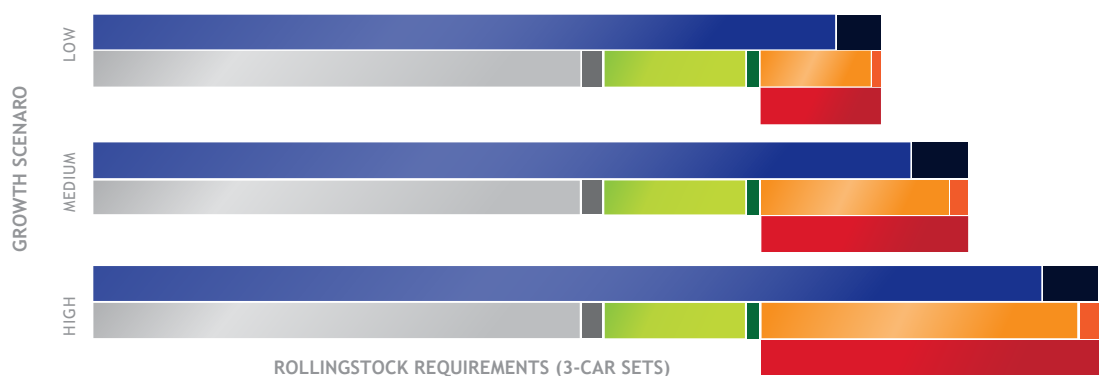
- > future strategic timetables designed to provide the greatest benefit to passengers for minimum infrastructure and operating cost
- > greatly increased understanding of future passenger impacts, including changes to travel times, service levels and access to express services
- > new fixed infrastructure requirements
- > new rollingstock requirements
- > new stabling requirements.

"Systemwide are at the forefront of rail operational planning and modelling in Australia. They possess the skills, knowledge and tools to effectively simulate rail operations into the future to aid decision makers on appropriate investment of rail infrastructure, services and rollingstock. Systemwide is a young and professional team that is motivated and always willing to address key challenges. A great joy to work with on the Rail Services and Infrastructure Requirements Study".

-Manager (Network Planning),  
Translink, QT-



Key output included Rollingstock requirements



SYSTEMWIDE