

# Brisbane Inner City Rail Capacity Study

## NETWORK:

Brisbane metropolitan network

## CLIENT:

Queensland Transport, Queensland

## DATE:

June 2007 - May 2008

Systemwide provided the rail operations expertise as part of a multi disciplinary team that identified solutions which would double capacity within the Brisbane rail network.

## The Challenge

Brisbane's inner city rail network is the heart of the Citytrain network for South East Queensland. Previous studies under The South East Queensland Integrated Plan and Program (SEQIPP) conducted by Systemwide, indicated the network will reach capacity in 2016 and require new corridors through the CBD to meet forecast capacity requirements.

A key challenge for Brisbane's rail network is to accommodate significant forecast growth in passenger demand over the next 20 years and beyond, while also supporting growth in freight traffic.

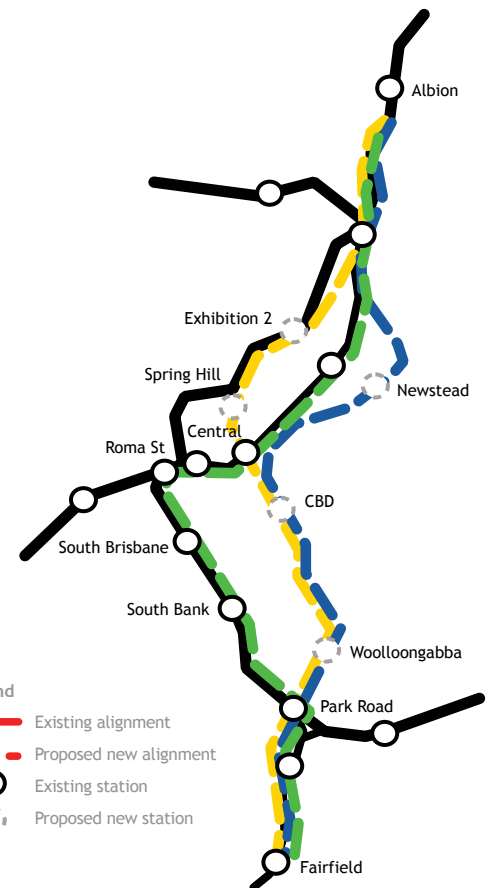
Queensland Transport commissioned the Inner City Rail Capacity Study (ICRCS) to identify and assess options for future development of the inner city rail network to provide sufficient capacity to cater for demand to 2026 while allowing for the longer term development of the rail network.

## Our Approach

The ICRCS was undertaken in several stages by a multidisciplinary team. Systemwide was engaged to provide rail operations expertise and played a key role in ensuring the recommended options achieved key study objectives, which included addressing identified network constraints and meeting future rail demand (passenger and freight).

As part of the role, Systemwide:

- > Worked with key stakeholders to define the initial options for further analysis
- > Developed Service Plans that would satisfy forecast growth
- > Quantified the capacity, reliability and service quality benefits and trade-offs of each option and recommended the short list for technical analysis
- > Produced a detailed infrastructure upgrade timeline to complement the overall SEQIPP timeline and program
- > Utilised a combination of rail operational modelling techniques and software including RailSys, Systemwide's Train Load Predictor and Planimate.



## The outcome

The study identified that the inner city rail network requires an additional four tracks on two new corridors—a doubling of existing track capacity—to meet forecast growth over the next 20 years.

The State Government has now publically committed to undertaking a detailed feasibility study to determine the preferred alignment of the first new route. The Federal Government is also providing funding from the Building Australia Fund.

If implemented, the projects arising from ICRCS will be some of the largest infrastructure investments ever made in Queensland.

The full study is available at [www.transport.qld.gov.au](http://www.transport.qld.gov.au)



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