

Brisbane Metropolitan Coal Capacity Study

NETWORK:

Brisbane metropolitan rail network

CLIENT:

Queensland Rail (QR) and Queensland Transport (QT)

DATE:

July 2006 to December 2006

The coal export boom has placed considerable pressure on rail operators to commit to increased annual coal tonnages on their rail networks from the mines to the port. Queensland Rail engaged Systemwide to advise on the capacity for increased coal tonnages through the Brisbane metro network and Port of Brisbane.

The Challenge

Growth in coal exports has resulted in a significant increase in the amount of coal that needs to be transported from Southwest Queensland to the Port of Brisbane via the Brisbane metropolitan network.

Systemwide was asked to analyse key elements of the current coal rail and port operation within the metropolitan area and the effects that anticipated growth in future metropolitan service levels would have on the ability of the network to accommodate increased coal demand.

Our Approach

This engagement required an in-depth analysis of key elements of the coal freight supply chain from mine to port, and its interaction with passenger trains and the metropolitan network. The analysis was conducted in three phases.

The first phase determined the maximum capacity of coal traffic on the current metropolitan network, assuming no changes to passenger or other freight services.

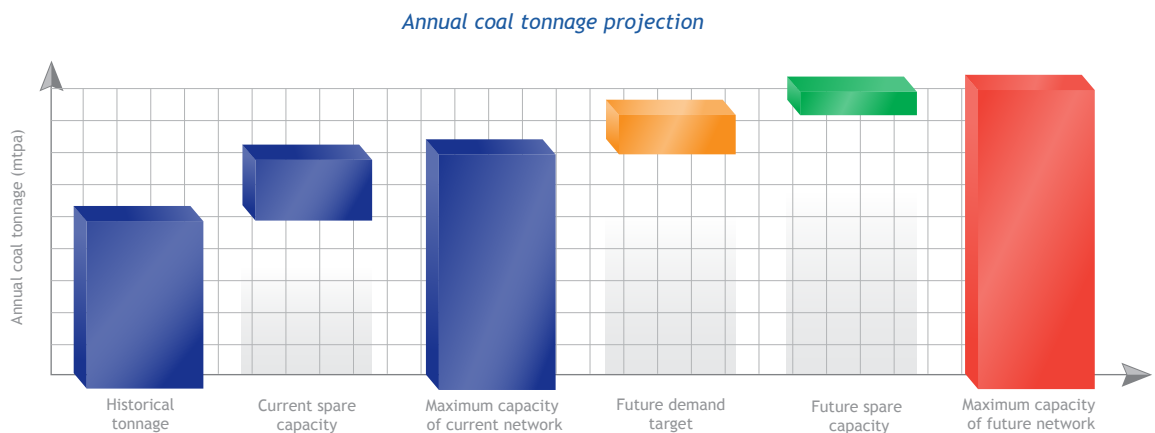
The second phase then identified the additional infrastructure to meet forecast future coal tonnages out to 2013.

Finally, the third phase was a sensitivity analysis looking at two scenarios:

- > The additional infrastructure required to support future coal tonnages if a higher off-peak frequency for passenger trains was implemented in the future
- > The infrastructure savings if longer and therefore fewer coal trains were operated.

The Benefits

Systemwide's findings have assisted QR in forming their long-term contracts with mining organisations. They have also allowed QR and QT to plan the infrastructure requirements relating to coal operations and understand the implications of policy decisions relating to passenger trains on future coal tonnage capacity.



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