



## Northern Sydney Freight Corridor, NSW

The Northern Sydney Freight Corridor Program is an initiative to improve capacity and reliability for freight trains on the Main North Line between North Strathfield and Broadmeadow, Newcastle.

The program, to be delivered in stages, will include grade separation, track amplification, passing loops and re-signalling to provide sufficient additional network capacity to meet long-term freight and passenger business requirements.

### FACTS AND FIGURES

**Client:** Transport Construction Authority

**Project value:** \$8 billion (outturn cost)

**E&P involvement:** 2009 to current

The key challenges for rail services between Sydney and Newcastle are:

- a shortage of holding loops (overtaking lanes)
- several steep inclines
- junctions causing delays at critical locations
- passenger services restrict freight services in the Sydney metropolitan area.

The program is designed to:

- improve freight train access through northern Sydney
- relieve a serious bottleneck
- create a more efficient freight rail network
- improve the frequency and reduce crowding on passenger services on the Main North Line
- allow 24-hour access for freight.

The program will reduce the potential for delays on the rail network caused by freight and passenger trains competing for the same tracks between Sydney and Newcastle.

The North Sydney Freight Corridor comprises fourteen specific projects between Homebush and Broadmeadow:

- North Strathfield Rail Underpass
- Hexham Passing Loops
- Epping to Pennant Hills 3rd Track Down
- Islington Passing Loops
- Gosford North Up and Down Refuges
- Rhodes to West Ryde 3rd Track Down Wired

- Pennant Hills to Hornsby Quad Unwired
- Hornsby Station and Freight Bypass
- Berowra to Hawkesbury River 3rd Track Up (Unwired)
- West Ryde to Strathfield Junction 4th Track Up
- Epping Enhanced Train Turnback
- Epping to Pennant Hills 4th Track Up (Unwired)
- Wyong 2 No. Passing Loops
- North Strathfield to Flemington Duplication

The projects will provide additional train paths primarily for freight use and in some cases will be electrified to allow for RailCorp's passenger services.

### Evans & Peck's role

Evans & Peck has worked with the NSW Transport Construction Authority (TCA) during the project definition and feasibility stage providing a range of services, including:

- Risk assessment
- Procurement advice
- Cost planning
- Constructability
- Programming

The work included:

- developing high level estimates for all fourteen projects of which three have progressed to a concept design phase

Providing reliable estimates for a major program of works at the identification stage and improving the estimate accuracy throughout design development



## Northern Sydney Freight Corridor (continued)

- providing a risk assessment and assisting in the development of the procurement strategy
- developing cost plans of the concept design for various options to upgrade existing stations between North Strathfield and Pennant Hills including:
  - modifications to existing concourses including demolition and replacement where required
  - underground access
  - disabled access to lifts and footbridges.
- providing a quantitative risk assessment, a detailed cost estimate , constructability analysis and staging for the three Phase 1 projects including:
  - the Strathfield rail underpass involving a cut and cover tunnel under three live railway lines south of North Strathfield Station Epping to Pennant Hills, 3rd track down involving a new rail bridge across the M2
  - Gosford North, up and down passing loops.