

North-South Rail Corridor Study

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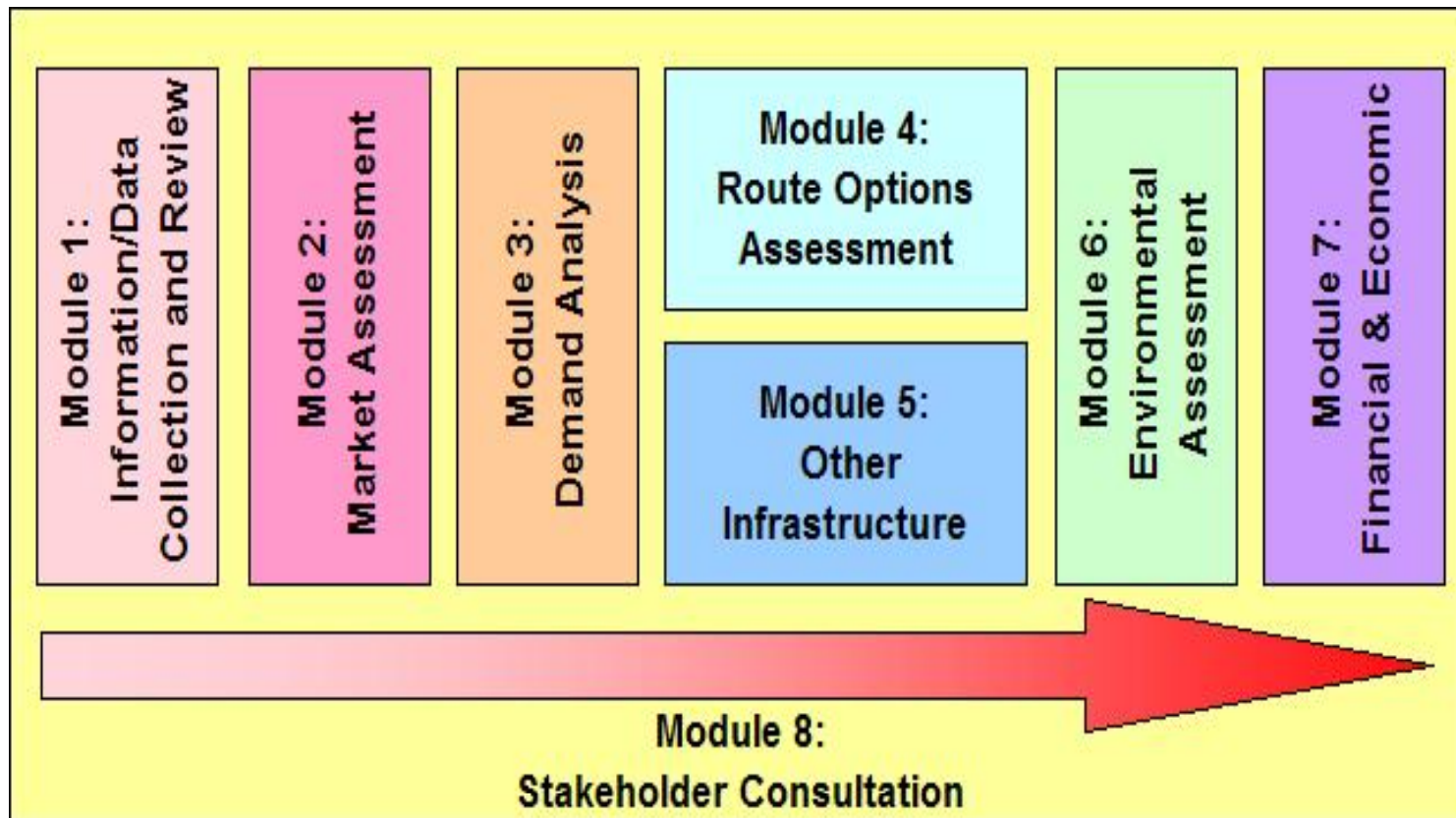
Study Objective

- Comprehensively examine future freight demand and capacity, and options for the Melbourne-Sydney- Brisbane rail corridor including;
 - Estimate of future rail demand
 - Infrastructure capacity and service provision
 - Financial and operational viability
 - Economic, environmental and regional benefits”

Key Issues to address

- Project Governance
- Estimating demand
- Engagement of regional stakeholders
- Confidentiality of data and information
- Technical feasibility of route options
- Transit times
- Dynamic modeling of outcomes

How Did We Do It?



Key Findings

- Freight within the Corridor largely consists of bulk commodities such as coal.
- Rail is a weak competitor to road for between 65% and 75% of the manufactured freight market.
- To compete with road a 27 hour rail transit time excluding PUD is required between Melbourne and Brisbane.

Key Findings

- Door to door price and reliability are the most important determinants of mode decision.
- 65% to 70% of decisions about mode of transport are based on price, reliability or availability.
- Rail services are presently too unreliable to attract significant freight volumes.
- The major constraint is congestion in the Sydney metropolitan network.

Key Findings

- Total Market Tonnage of freight moved by rail along the Corridor is expected to increase over the forecast period.
- The Melbourne-Sydney and Sydney Brisbane sectors are expected to grow slightly over the forecast period (2004 -2029).
- The Melbourne - Brisbane Sector will respond more quickly given the current ARTC upgrade.
- If there is an inland route, the share on the Melbourne-Brisbane Sector will grow further with some residual traffic on the Coastal Route.

Key Findings

- The composition of commodities moved along the Corridor is likely to remain broadly the same over the forecast period.
- With the exception of coal, freight to or from regional areas is projected to remain relatively modest.
- Improvements to rail access arrangements at terminal and port facilities will provide flow on benefits.

Corridor Options

- Far-Western Sub-Corridor
 - Junee to Brisbane via Parkes, Dubbo and/or Narromine, Coonamble, Burren Junction, Narrabri and/or Moree, North Star, Goondiwindi, Warwick and or Toowoomba.
- Central-Inland Sub-Corridor
 - Junee to Brisbane via any inland route that includes Werris Creek to Armidale to Tenterfield rail links.
- Coastal Sub-Corridor
 - Existing coastal route between Junee and Brisbane via Goulburn through Sydney.
- Hybrid Sub-Corridor
 - Combined inland coastal route, linking Junee to Brisbane via Muswellbrook and Maitland

Far Western Sub-Corridor

- 42 Route Options.
- 1,657km to 1,926 depending on route.
- New track required in multiple sections.
- Major projects Junee - Stockinbingal (Bethungra Spiral) and Inglewood-Calvert (Toowoomba Ranges).
- Transit time 20.4 hours via Albury or 21.3 hours via Shepparton
- Cost \$3.1b via Albury or \$3.6b via Shepparton
- Instances of threatened species on route

Central Inland Sub-Corridor

- 65 Route Options.
- 1,774km to 1,961km depending on route.
- New track required between Armidale and Tenterfield (Stanthorpe).
- Major projects Junee - Stockinbingal (Bethungra Spiral) and Cambooya Bypass-Calvert (Toowoomba Ranges).
- Transit time 23.1 hours via Albury or 24.2 hours via Shepparton
- Cost \$7.96 b via Albury or \$8.48 b via Shepparton
- Instances of threatened species, 11 Heritage items and 1 National Park on route

Coastal Sub-Corridor

- Existing route subject to ARTC upgrade.
- 1,740 km to 1,938 km depending on route.
- Substantial infrastructure works required to support trains longer than 1500m.
- New track required in multiple sections beyond ARTC program.
- Major projects Cootamundra -Yass, Gunning bypass, Cowan Bank, Fassifern-Stroud Road, Coffs Harbour - Casino and Casino to Border.
- Transit time 21.6 hours via Albury or 22.4 hours via Shepparton but solution may not address Sydney congestion.
- Cost \$10.20 b via Albury or \$10.71 b via Shepparton
- Instances of threatened species, 1 world heritage area, 2 wetlands, 10 heritage areas

Hybrid Sub-Corridor

- 79 Route Options.
- 1,974 km to 2,118 km depending on route.
- New track required in multiple sections.
- Major projects Werris Creek - Mussellbrook (Liverpool Ranges), Stroud Road, Coffs Harbour - Casino and Casino to Border.
- Transit time 25.6 hours via Albury or 26.4 hours via Shepparton.
- Cost \$6.32 b via Albury or \$6.8 b via Shepparton
- Instances of threatened species, 1 world heritage area, 2 wetlands, 4 heritage areas

Key Lessons Learnt

- Good project governance and consistent transparent communications are key.
- A partnership approach that engages Government, Industry and Community Interests is essential.
- A well resourced project team with the right skill sets is required from day 1.
- Commercial in confidence information must be protected.
- Allow sufficient time for modeling and testing of results. Ensure that models and tools developed are capable of reuse in subsequent stages.
- Analysis must be rigorous. Results must “speak for themselves”

The Final Outcome

- The study was commissioned by the former coalition government and was undertaken over a 15 month period from July 2005 to September 2006.
- The new Labour Government has commissioned the ARTC to undertake follow up work to develop an alignment along an inland route.

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