

Inland Rail - On Track Spatially!

Mark Pierce (Australia)

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SUMMARY

This presentation will focus on the critical role Surveying plays in delivering the Inland Rail Project to meet Australia's growing freight task, improve road safety, and reduce carbon emissions. □ Spanning more than 1,600 kilometres (km), Inland Rail is the largest freight rail project in Australia and one of the most significant rail infrastructure projects in the world. □ Inland Rail Pty Ltd, a subsidiary of the Australian Rail Track Corporation, is building Inland Rail on behalf of the Australian Government. □ Our work involves upgrading 1,000km of existing rail line and building 600km of new track to connect Melbourne and Brisbane via regional Victoria, New South Wales and Queensland. □ Freight travel time between Melbourne and Brisbane will be cut by almost a third – from 33 hours to less than 24 hours. □ The track will enable the use of double-stacked freight trains up to 1.8km long. Inland Rail will allow for the transit of greater freight volumes, with each 1.8km-long train capable of carrying the equivalent of 110 B-double trucks. □ The Project will enhance the Nation's freight and supply chain capabilities by connecting existing freight routes through rail, roads and ports. □ Shifting more goods onto rail means faster, more reliable freight; safer, less congested roads; and fewer emissions resulting in a more sustainable mode of transport. □ The Surveying team, a program-wide service function within Inland Rail, provides governance across the Program, supporting individual Project teams through the planning, design, construction, and handover phases. □ The team's key tasks include providing oversight and a governance framework. This enables the procurement of specialist survey services through discrete work packages with clearly defined scopes, ensuring fit-for-purpose deliverables and value-for-money outcomes. □ The linear scale and duration of the program have introduced significant complexities from a Surveying perspective. This presentation will outline the technical excellence demonstrated by the Inland Rail Survey team and the broader Spatial community engaged in the program. □ The presentation will showcase digital information produced by the Inland Rail team, which has allowed stakeholders—including the Inland Rail team, the community,

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and constructors—to access key datasets in an easy-to-digest format, generating positive program outcomes. □ The Inland Rail team has faced unique challenges. Working across three states covering 1,600km of regional work, managing two geographic zones, transitioning from GDA94 to GDA2020, and coordinating 12 discrete projects have created a complex Program of works. □ This presentation will explain how we met those challenges and solved them through: □ • Installing five Continuously Operating Reference Stations. □ • Establishing over 600 Permanent Survey Marks. □ • Improving cadastral boundary accuracy along the proposed corridor. □ • Capturing over 2,000km of aerial imagery and Light Detection and Ranging data. □ • Conduct Protection of Survey Infrastructure assessments. □ • Completing numerous plans of subdivision and acquisition to secure the rail corridor. □ Managing these complexities, while providing accurate, useful, and cost-effective spatial data with value extending beyond construction, has been, and continues to be a rewarding challenge for the Inland Rail Survey team. □ I welcome the opportunity to expand on these challenges and opportunities at Locate 25. □ □ □

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