

At Systemwide

We understand that railway operations are the critical interface between investment and the ultimate customer experience.

Working exclusively in the rail industry, our team combines extensive rail operations experience with a scientific approach to provide innovative and reliable solutions to the complex issues facing modern railways.



SYSTEMWIDE



Who we are

Our history

Systemwide was established in Melbourne in 1998 to provide independent strategic advice to the rail industry.

We were founded on the belief that rail operations are the critical interface between investment and the customer experience, and that effective solutions require both 'hands on' industry expertise and rigorous scientific and technical analysis.

Since inception we have grown to become one of Australia's leading independent rail advisors and are the largest dedicated rail planning team in Australia, currently comprising 12 full time professional staff and 2 part time administrative staff.

We are still growing today and continuing to seek new and innovative solutions to the challenges of modern railways. This includes the development of scientifically-based methods and software tools to maximise rail network capacity and passenger service levels.

As our size and capabilities continue to grow, we will always stay true to our vision—to help clients make the strategic choices that deliver superior returns on investment and a positive customer experience for the right risk profile.

Systemwide is fully owned by URS Corporation.

Our projects

Over the last eleven years we have conducted hundreds of studies and are pleased to call many of Australia's operators, regulators and planning authorities our clients. Some recent projects include:

> Sydney's long term rail strategy

Assessed the infrastructure requirements, operability and customer impacts of four potential strategic plans for Sydney's rail network.

> Heavy haul system operating plan

Designed a heavy haul rail operating strategy for a mining company as part of the overall business case development.

> Brisbane rail implementation plan

Developed an implementation plan for initiatives to augment Brisbane's rail network capacity leading up to the introduction of the Cross River Rail tunnel.

> Cross River Rail project

Operational and planning advice as part of a detailed feasibility study into a new underground rail corridor through the inner-city of Brisbane.

> Melbourne light-rail strategic operating plan

Developed a single coherent document that brought together Yarra Trams' operational strategies for the medium to long term.

> Safety assessment of Queensland rail network

Recommendation of the most appropriate signalling system to support long term safety and capacity requirements on the South East Queensland rail network.

> Supply chain modelling for a heavy haul rail operation

Determined achievable export tonnages for a large Greenfield mine-rail-port project as part of a rapid due diligence.

> Goonyella coal system operating plan

Developed an operating plan which will allow Queensland's Goonyella coal system to meet the demand requirements of the ports around Hay Point.

> Melbourne metropolitan rail franchise

Strategic operations planning advice to the MTM consortium in their successful bid to operate the Melbourne metropolitan rail franchise.

> Assessment of in-cab signalling system

Assessed the capacity, operational and implementation issues to feed the business case for a new ETCS signalling system on the Sydney rail network.

> Adelaide rail capacity study

Assessed the issues, constraints and opportunities with the existing and future rail network into and around the Adelaide CBD.

> Business case for new train crew depot

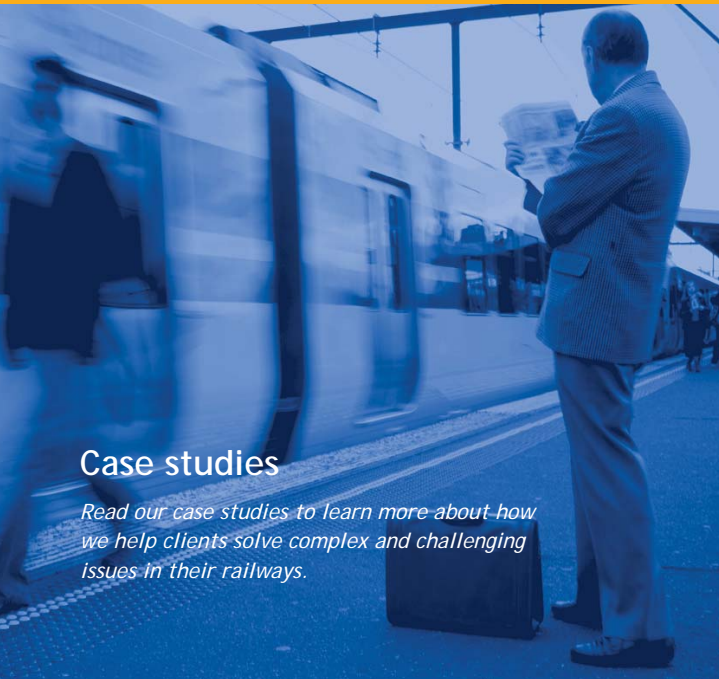
Determined the benefits and costs of opening a new crew depot in a Queensland coal rail operation.

> Pilbara iron ore railway upgrades

Capacity modelling of a critical part of a Pilbara heavy-haul rail network to determine the effectiveness of planned upgrades.

> Southeast Queensland Transport Plan

Advised the Queensland Government on their regional transport plan to 2051 called Connecting SEQ.



Case studies

Read our case studies to learn more about how we help clients solve complex and challenging issues in their railways.

What we do

Our expertise

Systemwide's expertise is centred around operational planning and network capacity for complex metro, heavy-haul, freight and light-rail networks. We help clients find innovative and creative strategies to meet the challenges of the future while improving performance today. Our advice is underpinned by fact-based scientific analysis and our deep understanding of the key drivers of a well performing railway.

Our core capabilities include:

> Operations strategy and planning

We help clients develop long term strategies and plans for their rail networks. We provide a framework for investment and a plan for how the railroad may evolve in the future. We ensure our clients understand the impact of different strategic decisions on the success of their railway.

> Network capacity assessment and planning

Systemwide's expertise is centred around operational planning and network capacity for complex metro, heavy-haul, freight and light-rail networks. We advise on different strategies to increase capacity and help clients understand how many passengers or tonnes they can carry. We assess the strengths and weaknesses of different operational and infrastructure solutions and construction pathways.

> On-time performance forecasting and improvement

We effectively predict the punctuality and reliability of networks and help clients understand such things as the number of trains that can be reliably run over time until capacity is reached. Our expertise assists clients in implementing infrastructure, rolling stock and operational initiatives to maintain and improve reliability.

> Service plan (timetable) development and optimisation

We specialise in developing and optimising strategic service plans and detailed timetables that satisfy patronage demand, optimise asset utilisation and improve customer service levels. We use a range of tools, including Train Load Predictor which measures the impact of a service plan on passenger experience.

> Franchise bid advice

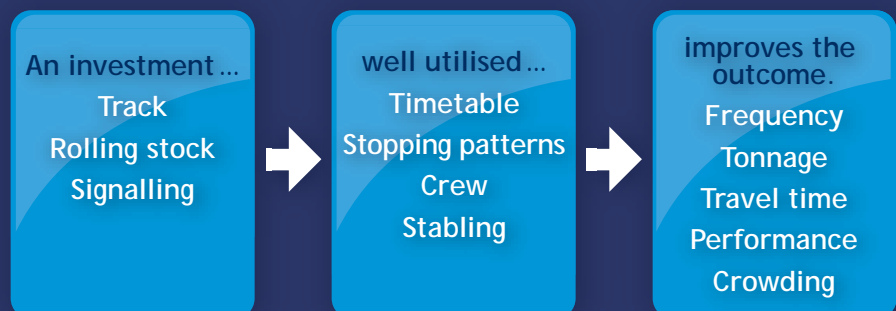
We provide potential bidders with a detailed understanding of the 'target' network and operations and advise on such things as patronage forecasting, service planning, performance payments, cost forecasting and infrastructure requirements. Our advice helps bidders appropriately balance cost with risk to maximise their chance of success.

> Training

Optimising and planning for rail networks, particularly those with a mix of metro, regional and freight services, is complex. We have a comprehensive training programme to provide organisations and their staff with the specialist skills to conduct sophisticated capacity planning and service plan design.

Rail operations are the critical interface between investment and the ultimate outcome.

Systemwide helps you assess the customer impact of an investment decision by understanding how the core elements of railway operations must effectively utilise the investment to deliver customer benefits.



Our people

Our strength lies in the outstanding capabilities and experience of our people. In line with our philosophy, people join us from a variety of backgrounds including railway operations, railway planning, mathematics, engineering and computer science. Our team has collectively 63 years experience in rail operations and rail planning.

We believe that sustained investment in our staff translates directly into value for our clients. Our structured approach to learning, which includes development gateways, provides staff with the skills to effectively apply their intellect and advise our clients. We also encourage and sponsor staff to build their capabilities through external studies.

Our clients can feel confident their projects are always supported by highly qualified and experienced consultants.

Our difference

Systemwide is unlike any other engineering or consultancy firm in the rail industry. We take great pride in the value we bring to clients, which comes from our:

> Unique experience and skills

We bring together the best of intellectual acumen and practical rail experience. This enables us to provide clients real insight into the challenges they face.

> Deep analytics, innovation and science

We have a strong focus on scientific analysis rather than anecdotal evidence. This enables us to reach objective, factual conclusions that help clients make the right investment decisions.

> Results driven culture

We believe our role is simply to provide value to the client. We closely manage our projects and adapt our approach to ensure that insight and value are generated; we don't blindly follow a brief.

> Collaborative approach

The principles by which we operate—apply rigour, continuously improve, challenge, communicate, deliver—require collaboration with each other and our clients. We believe that much of the benefit of our work comes from teasing out and discussing the critical issues.

> Independence

We are not aligned to rail operating companies, contracting firms or technology providers. We have the independence to take a view that is original and sometimes challenging.

Our tools and techniques

State of the art analytical techniques and software underpin our advice and we have capability in most market leading rail simulation packages including RailSys (SIMU++), DISPO++, RAILSIM TPC, Planimate and Train Load Predictor. That said, we pride ourselves on pushing the boundaries of existing software capability and often use a combination of products in unique and innovative ways to find better solutions for our clients.

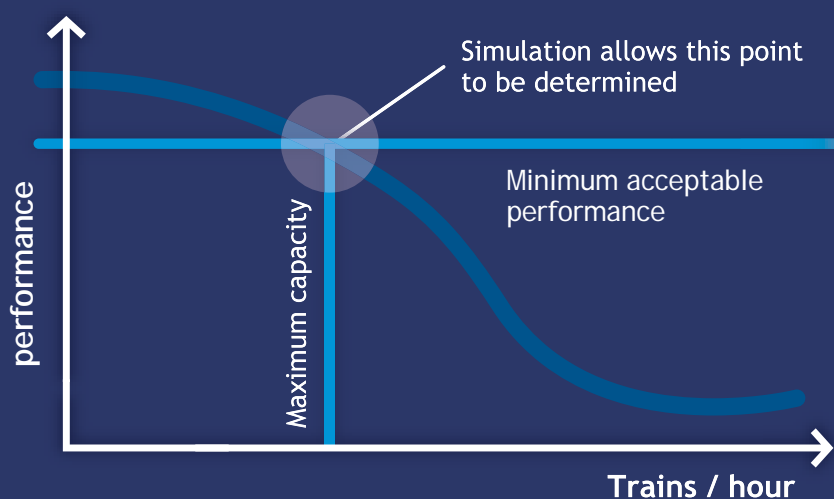
Our awards

> Victorian finalist for the Telstra Small Business Award, 2008

> Small Business Champion Awards, 2008 & 2009

On-time performance is both a driver and indicator of network capacity.

An understanding of how the number of trains operated influences performance is critical to accurately determining a network's capacity. Systemwide uses detailed simulation to establish your network's maximum capacity by identifying the critical point where performance drops to the minimal acceptable level.



About Systemwide

Systemwide is a leading independent strategic advisor to the rail industry.

We help clients find creative solutions to the challenges of the future while improving performance today.

Our expertise includes operations strategy and planning, on time performance forecasting and improvement, network capacity assessment and planning, services plan development and optimisation and franchise bid advice.

For more information visit:

www.systemwide.com.au

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