



# **GHD** Transportation

# “Efficient, reliable and well-planned transportation systems are fundamental to a community’s economic prosperity and quality of life.”

David Kinniburgh - Market Leader - Transportation, Australia

**Economic and population growth, greater urbanization and increased mobility are boosting demand for new infrastructure and services straining the capacity and effectiveness of existing assets. Single mode approaches are no longer viable as governments and stakeholders recognize the need for multi-modal solutions across the whole integrated network.**

## Who we are

Across the whole transport spectrum of airports, marine, roads and highways, rail and logistics, our team provides integrated transport services throughout the project lifecycle - from initial policy, transport planning, economics and business case advice, through concept, procurement, detailed design and construction to operations, maintenance and asset management. We'll help you to develop sustainable solutions which balance infrastructure investment with demand reduction, land use strategies and system efficiencies.

## Services

- Active transport
- Asset and facilities management
- Airports, aviation & pavements
- Intelligent Transport Systems
- Marine, ports and harbors
- Network logistics, traffic & transport modeling
- Operations support
- Rail, roads, highways & bridges
- Transport planning
- Transport policy, economics and logistics

- Tunneling
- Traffic engineering
- Urban freight

## Our approach

We look at the bigger picture. Demand for resources globally can only be met through the provision and maintenance of innovative, flexible and sustainable transport infrastructure. Working with our team, you'll benefit from the security that comes with a presence on the ground, coupled with global industry experience. Should your project divert course, we have the competency to adjust accordingly, meaning you can feel comfortable that you'll meet milestones, even as the scope changes. You will enjoy a distinctly relationship-based service. Yet, our transportation offering extends beyond the trusted advisor relationship. We'll work closely with you and offer reliable, cost-conscious advice to ensure you meet your objectives.

## Why we are different

**We understand what influences industry**



The link between transport investment, accessibility and economic activity is at the forefront of your mind. We look to the key influences in transport to get your project on track:

- **Integration** - our offering extends across technical engineering disciplines and into geotechnical and environmental services. We lead the intermodal transport industry in Australia with the ability to innovate and a track record in consistent project success
- **BIM** - visualization for the full lifecycle of your project. Allow your end-operators to visually identify with solutions prior to construction
- **Safety and auditing** - we'll get you ready for pre-regulatory visits and help you develop strategy to ensure you succeed
- **Asset management** - helping you maintain and extract the most from your assets by managing them well beyond the project construction phase

- **Mode operations** - we understand how transport is timetabled, and reasons why it may not meet schedule
- **Operational modeling** - network logistics modeling

## Intelligent Transport Systems (ITS)

Today's transport network is broader than the traditional road infrastructure that motorists drive upon. The issues and requirements of the transport system and its users now demand the use of benchmarking technology to make better use of infrastructure. ITS integrates computing and electronics with information technology and communications to solve transport problems. It utilizes the skill of engineers across the road, rail, traffic, electrical and communications sectors.

## A multidisciplinary approach

Our 5500-strong family cuts across disciplines including architecture, engineering, environmental and geotechnical consulting, planning, economics and asset management. This gives you direct access to the full facet of services necessary to deliver project success. It's not just about delivering core transport engineering solutions. We provide complete turn-key solutions from pavement engineering through industry compliant lighting and community-conscious landscaping.

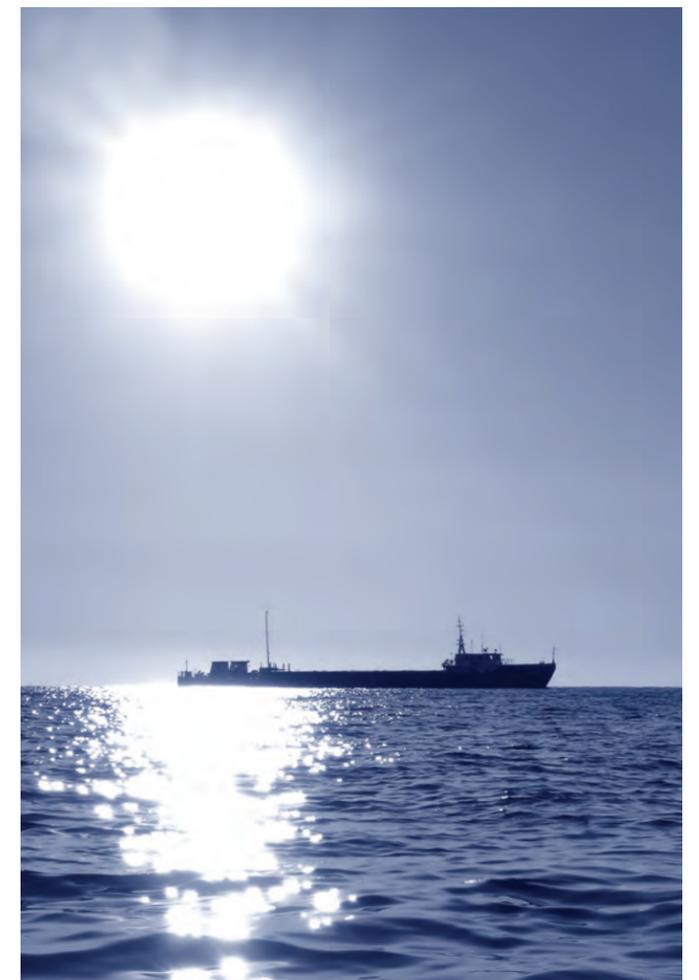
## Where we've done it well

GHD and its Horizon Alliance partners are transforming Brisbane by delivering South-East Queensland's first major integrated road and rail project which will provide faster, safer public transport to the capital's southern suburbs.

Work on the USD600 million first stage of the USD1.6 billion Darra to Springfield transport corridor began in 2008 and is on track to be completed in 2011. It involves constructing a 2.2 mile long passenger rail line from Darra to Richlands, where a new station is being built. The Centenary Highway will also be widened from two to four lanes over 2.8 miles km from Richlands north of the Logan Motorway interchange. GHD's Project Director Martin Peelgrane has led a team working with Horizon partners the Department of Transport and Queensland Rail, Kellogg Brown & Root, and John Holland. They have collaborated on geotechnical and hydrology studies, engineering of road and rail structures, architectural and landscaping work and design of communication and power systems. GHD's team has also helped secure environment and planning approvals and managed community consultation.

**“This is the first time major road and rail projects have been constructed alongside one another in Queensland, so it's a watershed project with an important cultural aim. The idea is to offer a genuine alternative to the car by promoting public transport.” - Martin Peelgrane, GHD**

To engage community interest in the project, GHD and its alliance partners worked with a professional artist to develop a mural for the rail precinct.



## Where we've done it well

GHD was one of four organizations on the Southern Gateway Alliance, a public-private partnership between Main Roads WA, Leighton Contractors, GHD and WA Limestone, to create the Kwinana Freeway Extension and Forrest Highway, south of the Perth metropolitan area, as part of the New Perth Bunbury Highway project.

GHD was lead designer for all aspects of the USD690 million project. This included roadworks, structures, geotechnical, environmental approvals, investigations and management plans, lighting, signals and ITS systems.

The project involved a dual carriageway inter-regional road link between Perth and the South West region of Western Australia over a length of about 44 miles, including an extension of the four-lane Kwinana Freeway from Safety Bay Road to south of Pinjarra Road, with a further extension to Lake Clifton designed as a high speed four-lane rural highway, incorporating 19 bridges and five interchanges.

The project was completed six months ahead of schedule and within budget. The Alliance undertook both the design and construction phases and received the 2009 Engineers Australia (WA) Engineering Excellence Award.



## About GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, architecture, environmental and construction services to private and public sector clients.

Established in 1928 and privately owned by our people, GHD operates across five continents – Asia, Australia, Europe, North and South America. We employ more than 8500 people in 200+ offices to deliver projects with high standards of safety, quality and ethics across the entire asset value chain. Driven by a client-service led culture, we connect the knowledge, skill and experience of our people with innovative practices, technical capabilities and robust systems to create lasting community benefits.

Committed to sustainable development, GHD improves the physical, natural and social environments of the many communities in which we operate. We are guided by a Practice Quality Management System, ISO 9001:2008 and an Environmental Management System, ISO 14001:2004 which are certified by Lloyds Register Quality Assurance.

In alignment with the global demands of water, energy and urbanisation, our aim is to exceed the expectations of our clients and contribute to their success.

For more information, visit [www.ghd.com](http://www.ghd.com)

