HIGH SPEED RAIL

World leader in connecting cities faster through development and implementation of highand higher-speed rail projects.



Jacobs works with global clients to provide a range of expertise and services that are demonstrated through more than 5,500 km of high-speed rail to date. Jacobs utilises and integrates local knowledge with our global expertise to successfully deliver complex solutions and leverage our dynamic capabilities to deliver technical excellence and value.

SERVICES PROVIDED

- Programme Delivery Partner
- Engineering Delivery Partner
- Route Alignment & Engineering
- Signalling & Communications
- Station & Depot Design
- Commercial Development Integration
- Environmental Impact Assessments
- Programme & Construction Management
- Tunnel & Geotechnical Engineering
- Vehicle Engineering & Procurement
- Design Specifications & Procurement
- Railway Simulations & Planning
- Railway Operations & Operations Planning
- Railway Safety Management, Risk Assessment & Auditing

For more information contact our Global Principal for High-Speed Rail, **Sam el Jouzi** at railandtransitinfo@jacobs.com.

OUR APPROACH

Jacobs' high-speed rail expertise encompasses a range of professional services, including consulting and advisory, technical, scientific, project delivery and programme management for governments and the private sector. We deliver technical excellence and value by working collaboratively with our clients and drive long-term efficiencies across the development, design and delivery of projects.

PROJECT EXAMPLES



High Speed 2

Jacobs has supported HS2 Ltd. since 2016, initially as development partner. As HS2 Ltd.'s Engineering Delivery Partner. We provide a unique combination of high-speed rail and programme management experience, supporting the mains civils contracts and stations. Jacobs is also completing detailed design for 21.6 km of high speed infrastructure that includes a 3.4 km viaduct, 16 km twin-bored tunnels and five intervention and ventilation shafts.



California High Speed Rail

Jacobs is responsible for the entire infrastructure design of Construction Package 2-3, acting as lead designer on a 65-mile segment. Jacobs developed design alternatives and refinements that reduced construction costs by over \$500M and CO₂ production during construction by over 200,000 tonnes. Over the life of the project, Jacobs' refined design has saved more than \$185M in maintenance costs. Jacobs was awarded two additional civils design packages in 2022 - the Bakersfield Extension and Merced Extension to Stantec, designing the geometry of the high-speed rail corridor, structures and has geotechnical oversight.





MyHSR

Jacobs supported MyHSR Corp as Technical Advisor to develop the project, assist with the planning and design of the Malaysian section of the route and provide bespoke project management support. Jacobs completed a Feasibility Study for the route providing transport planning and ridership forecasting services to a private consortium. Jacobs was the Reference Design Consultant to design the five intermediate stations and high-speed rail infrastructure works associated with the station development, including access roads, highway links and pedestrian links into existing infrastructure.



Abu Dhabi to Al Ain

Jacobs' team successfully delivered a feasibility study for a high-speed railway (350 km/h and 320 km/h) from Abu Dhabi to Al Ain in UAE. Our scope on this project included Demand Assessments, Railway Operations, Definition of Rolling Stock, and all engineering functions. At this stage we also developed Capital Cost Estimates and Operating Costs to feed into the financial model developed by others. Our core client facing team was supported by our delivery specialists and teams in UAE, UK, India, Australia and USA.

Some of our other representative projects include:



Link to our website: https://www.jacobs.com/solutions/markets/infrastructure/transportation/rail-transit