

Moving goods and the economy

Freight Rail

Inspiring solutions today for a sustainable tomorrow



Burlington Northern
Santa Fe Railway (BNSF),
San Joaquin Corridor, Central
Valley, California, U.S.

Cover:
Mississippi River Intermodal
Terminal and Yard Improvements,
Port of New Orleans, Louisiana, U.S.

At AECOM, we understand the rail industry and the myriad of challenges our clients face. We provide local, sustainable solutions enriched by global expertise.

Our experienced specialists plan, design and engineer rail operations to move goods effectively across states and provinces, countries and continents. We speak the language of our clients, customizing solutions to meet the specific needs of Class 1, short line, industrial and passenger operations. Our professionals challenge conventional methods, applying new ideas and exploring new opportunities to rehabilitate and develop high-performing freight rail systems to help our clients meet their objectives. Our rich history in rail networks incorporates expertise in:

- Capacity planning and analysis
- Permitting and environmental services
- Track, bridge and structure design and inspection
- Shop, yard and building construction and rehabilitation

- Train control and grade crossings
- Communications and signals
- Program and construction management

AECOM's rail experts are leading providers of professional, technical and management support services, from operational capacity planning and analysis to environmental assessments, and from engineering design through construction and program management. We apply advanced, sustainable solutions to integrate these demands seamlessly, benefitting our clients and the communities around them. With a network of 350 rail professionals backed by an organization that's nearly 80,000 strong, we combine global best practices with local insights to develop innovative solutions for today that meet the goals of tomorrow.



Clockwise, from left:
Association of American Railroads (AAR)
 Chicago, Illinois, U.S.

San Joaquin Valley Railroad
 Central and San Joaquin Valleys, California, U.S.

Canadian Pacific Railway
 Canada and northern U.S.



CSX Relocation
Multiple Locations, U.S.

Bridges and structures

Managing infrastructure is critical to maintaining and growing rail traffic. At AECOM, our experience encompasses all forms of bridge structures for all varieties of rail networks. Our experts' capabilities encompass inspection, design, contract documents, construction management, and final certification. As bridge and structure asset management specialists, we customize plans to meet our clients' specific needs, applying advanced technology and materials to make these plans a success.

Our structural experts work closely with rail agencies and owners across the Americas, developing and delivering practical solutions that achieve high-caliber results. For example, when BNSF Railway needed to replace a heavily used trestle bridge over the Fraser River in British Columbia, Canada, the company turned to our rail professionals to meet the challenge. With our knowledge of rail operations, we worked with BNSF and two other rail owners to implement a design and schedule that allowed the bridge to be removed and replaced with minimal disruption to rail traffic.

Operations capacity planning and analysis

Rail operators are looking to manage capital and operations and maintenance costs while facing a wide range of evolving financial challenges that impact project success. Our rail professionals draw from our railway operations and engineering experience to develop solutions that address clients' specific needs. From evaluating a switching operation to simulating an entire network, our integrated approach, market insights and delivery excellence provide cost and operational efficiencies that have a lasting impact on client satisfaction.



BNSF Fraser River Bridge,
Surrey, British Columbia, Canada



Track and roadway

At AECOM, our professionals continually develop and maintain the solid foundations rail networks need to move goods across continents. We collaborate with our clients, delivering expertise across all aspects of track and roadway services. Whether upgrading new track or developing new track alignments, we coordinate with agencies, consultants and stakeholders to deliver solutions that work. Our professionals work as a team to deliver solutions that meet obstacles head-on, such as in East Felton, Pennsylvania, U.S., where AECOM delivered project and construction management services and reviewed construction submittals for the addition of CSX Transportation's much-needed two-mile second track. Our oversight ensured a high standard of quality to meet the rail agent's needs and vision.

Yards, terminals and intermodal facilities

Our specialists believe seamlessly integrating facilities is the key to a successful rail network. We define innovation, working with our clients to develop or revitalize complex rail facilities to meet their connectivity needs and keep goods flowing to communities throughout the Americas. Working as partners with the Canadian National Railway, we used our conceptual modeling and operations skills to perform a feasibility study and prepare the conceptual and final detailed design for its new 155-acre intermodal facility in Memphis, Tennessee, U.S., allowing the railway to meet its goal of increasing the mobility of goods into and out of the region.

Our talented teams understand the whole process, focusing the right skills from business planning and operations analysis to design, permitting and construction management, and overall program management. We develop comprehensive facilities that meet our clients' visions for sustainable and efficient facilities.



Clockwise from left:
Colton Crossing Flyover,
Los Angeles, California, U.S.

Canadian National Railway, Canada and
northern U.S.

BNSF Stockton Intermodal Facility, Stockton,
California, U.S.



Alameda Corridor,
Los Angeles, California, U.S.

New corridors and expansions

In addition to meeting today's demands, AECOM's experts are helping to lay the foundation to meet tomorrow's needs. As leaders in the rail industry, we are hard at work developing new corridors, expanding current ones and exploring ways to enhance shared use of limited transportation corridors among freight, transit and commuter rail to meet the transport needs of a continent in motion. We apply our extensive experience to tackle the most complex projects, such as the Alameda Corridor in Los Angeles, California, U.S., where, as program manager, we worked with the Alameda Corridor Transportation Authority to consolidate 90 miles of branch track between downtown Los Angeles and the ports of Los Angeles and Long Beach, resulting in reduced congestion at 200 grade crossings and improved freight movement throughout the area.

We partner with our clients to improve safety, maintain daily operations, control costs, and comply with construction and design standards and local requirements. Whether identifying new corridors or expanding current ones, we strive to enhance our environment and work with communities to find solutions that satisfy all stakeholders.

Communications and signals

AECOM's rail professionals understand that safety is paramount on the rails and on the road. We collaborate with our clients to assess grade crossings in urban and rural settings across the Americas. Our teams work with stakeholders and outside agencies to create efficient systems that fulfill the mandate for safety on the rails. Because effective rail signals are vital parts of a safety program, we continuously evaluate new technologies that improve public safety while maintaining the flow of rail traffic. We partner with railroad companies to deliver long-

term solutions that enhance their capabilities while keeping the rails running on time and safely.

In Houston, Texas, U.S., AECOM is helping the Gulf Coast Rail District develop and implement a systematic approach to rail improvements around the city. By creating a priority list for urgent issues and addressing concerns relating to safety, security, mobility, access and quality of life, we identified system improvements that greatly enhance the rail network and surrounding neighborhoods.



Gulf Coast Rail District
Fort Bend Bypass Study,
Houston, Texas, U.S.

Port of Los Angeles Pier 300 Intermodal
Container Transfer Facility,
Los Angeles, California, U.S.



About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a *Fortune 500* firm and its Professional Services business had revenue of \$13.3 billion in fiscal year 2021. See how we are delivering sustainable legacies for generations to come at aecom.com and [@AECOM](https://twitter.com/AECOM).