

# Innovation. Expertise. Progress.

## Urban Rail Program Services



Parsons PLUS envision more

## End-to-End Project Delivery Solutions

Parsons has designed, constructed, and enhanced the most complex and advanced urban rail transit systems across the globe. From the largest design-build transit project in the United States, to the short extension of an existing rail line, Parsons is the trusted partner for urban transit. We understand our customers' needs from the inside out—from both the owner's and the user's side—and bring them together with expertise and technology to deliver cost-effective and innovative solutions to meet each of our customers' unique needs. In addition, Parsons helps reduce owners' project risk through our market-leading experience and expertise in alternative project delivery, including public-private partnerships, design-build-finance-operate-maintain, and construction management at-risk. When it comes to urban rail, Parsons is the ticket to success.

### **The Wave Streetcar, Fort Lauderdale, FL** **Prime Contractor—Design & Project Management**

Parsons is bringing its global leadership in urban rail to the design and project management of this 2.8-mile downtown streetcar system, which will operate on embedded tracks in mixed traffic. Powered by both battery and overhead electric lines, the system will include 13 stations, state-of-the-art communications and safety security systems, a streetcar vehicle maintenance and storage facility, streetscape improvements, and a traffic signal prioritization system.

### **Houston Metro LRT, Houston, TX** **Design-Build Joint Venture—Managing Partner, Project Oversight, & Quality Assurance**

This project ranks as the largest public works initiative in Houston history, and while under construction, was the largest design-build transit project in the United States. Bringing global best practices, Parsons served as design-build joint venture (DBJV) managing partner and also provided project oversight and quality assurance. The DBJV upgraded safety and operations of METRO's Light Rail Transit (LRT) system while extending its service 15 miles with 3 new lines, 24 stations, and 2 new storage and inspection facilities. Parsons also performed major renovations to the existing operations control center, constructed or rehabilitated 8 LTR bridges, and provided roadway and sidewalk improvements along the 62 lane miles of guideway that featured 87 signalized at-grade crossings and 36 miles of public and private utility relocations.



## Seattle Streetcar Center City Connector, Seattle, WA

### Prime Contractor—Design & Program/Project Management

Innovation is at the heart of Parsons' design of this 1.5-mile modern streetcar corridor that will link two existing lines and serve the city's three intermodal hubs (Westlake Center, Coleman Dock, and King Street Station). The system features a substantial amount of off-wire operation as well as streetcar-exclusive double trackway for the vast majority of the line—making it one of the first lane-exclusive modern streetcar systems in the United States. In consideration of the streetcar system's path through Seattle's dense urban and historical neighborhoods, Parsons is conducting public outreach and stakeholder engagement throughout the project, including coordination with historic design boards.



## Foothill Gold Line Extension, Los Angeles, CA

### Design-Build Joint Venture—Design, Engineering, & Construction Support

LA Metro has relied upon Parsons' urban rail and sustainability expertise for several of its projects, including design of the Foothill Gold Line extension. This section adds 11.5 miles of rail service, 6 new stations, 24 bridges, 14 at-grade rail crossings, a 24-acre operations campus, as well as a maintenance and operations facility—the first building of its kind to receive Leadership in Energy and Environmental Design (LEED®) Gold certification. Parsons utilized innovative building information modeling (BIM) and created design data in a 3D format to save time and costs.



## Central Mesa Light Rail, Mesa, AZ

### Design-Build Joint Venture—Design

Based on Parsons' successful design of other sections of the rail line, Parsons was chosen to provide final design of this 3.1-mile, street-running light rail extension. Serving the business, arts, and entertainment district, the line includes four station platforms designed to provide hot weather relief, a park-and-ride facility, embedded double track, three traction power substation sites, signals interlocking, and an overhead contact system for electrical train power. The team worked with the City of Mesa and local artists to incorporate station design elements that reflect the rich cultural heritage of each neighborhood. In addition, Parsons designed a new WiMAX-based communications system for the line, which provides more reliable communications for the system.



## McKinney Avenue Streetcar Extension, Dallas, TX


### Prime Contractor—Design

Parsons' creative design of the McKinney Avenue trolley system extension along Olive Street in downtown Dallas supports the envisioned modern streetcar while honoring the existing historic streetcar on the alignment. The new track eliminates one Olive Street travel lane, allowing for bi-directional streetcar movements on a single track—except for a short 2-track section where streetcars can pass each other. The project also included traffic signal modifications, signing, pavement striping, and extension of the electrical overhead contact system.




## Parsons—Your Partner of Choice for Urban Transit

Our impressive record of success in delivering urban rail solutions is illustrated by our impressive safety record, repeat customers, award-winning project lists, and wealth of expertise. When it comes to urban rail, the numbers speak for themselves.

  
**\$5.65B**  
Constructed Value  
LRT Final Designs

  
**243**  
Miles of Track

  
**123**  
Stations

  
**9**  
Maintenance and  
Storage Facilities