

PARSONS

**Designer.
Builder.
Developer.**

**We're not changing the rules.
We're changing the game.**



Parsons PLUS envision more

Parsons

Alternative Project Delivery

Parsons is a technology-driven engineering services firm with more than 70 years of experience in the engineering, construction, technical, and professional services industries. The corporation is a leader in many diversified markets with a focus on infrastructure, defense, security, and construction. We deliver design/design-build, program/construction management, systems design/engineering, cyber/converged security, and other professional services packaged in innovative alternative delivery methods to federal, regional, and local government agencies, as well as to private industrial customers worldwide.

As the global demand for new and revitalized infrastructure grows, project size, complexity, and cost are increasing, heightening risks for project owners. From public-private partnerships (P3s) and design-build to integrated project delivery and construction management at-risk, Parsons can execute projects of any size or complexity, using the alternative project delivery (APD) method most advantageous for each individual customer. We are confident we can save you time, add value, minimize risk, and provide the flexibility you need to make your project a resounding success.

APD benefits can include:



**Design and Construction
Innovation**



**Life-Cycle
Cost Savings**



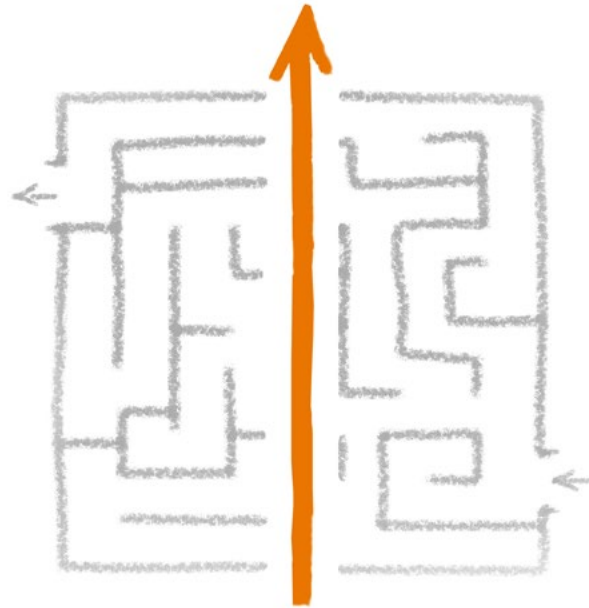
**Appropriate
Risk Transfer**



**Cost and
Schedule Certainty**

Parsons— We're a Game-Changer

The demand for new and enhanced infrastructure is at an all-time high. Projects are larger and more complex. Costs are outpacing funding. Disruptive technology is creating uncertainty in how best to meet the needs of today while planning for the technological advances of tomorrow. It's a whole new set of rules, and it's a difficult maze to navigate.



Parsons can help you break through the complexity and achieve your project goals with greater success.

It's a break from the traditional way of thinking and doing business, taking a whole new approach to tackling the challenges of what seems like a brand new world.

Parsons—An Integrated APD Solutions Provider

Designer. Builder. Developer.

Parsons is one of the world's most trusted engineering and construction firms. With our equity and development arm, we are uniquely qualified as a full-service “one-stop shop” and technical advisor. Parsons can participate at all project levels, from bid through final handback. Choose us for one role, for two roles, or for a project delivery approach that combines all three to gain the advantages of working with a single supplier for the delivery of a fully integrated, project life-cycle solution.



Designer

Lead Designer or DBJV Partner

- Delivers high-quality, innovative, constructible designs
- Integrates life-cycle solutions
- Provides design and construction risk analysis and mitigation
- Uses alternative technical concepts to save costs and implement innovations



Builder

Prime Contractor or DBJV Partner

- Performs construction
- Provides construction management (superintendents, field supervisors, project managers)
- Prepares estimates and schedules
- Performs construction planning
- Implements quality, safety, and project controls



Developer

Equity Investor or Concession Partner

- Develops and implements bid strategy
- Manages project consortium and interfaces directly with client
- Provides equity and arranges project debt
- Executes overall project

Parsons' Core Values

Critical to Partnering Success



Safety

We maintain a safe and healthy environment in all of our offices and on each of our projects.



Quality

We provide high-quality services and products. We meet requirements the first time and strive for continuous improvement.



Integrity

We uphold our reputation for integrity and provide an ethical workplace. We do the right thing each time we face a tough decision.



Diversity

We actively pursue diversity in our workforce, markets, and services. Technical challenges require new perspectives and open minds.



Innovation

Through inventive processes and unique solutions, we provide unmatched value to our customers.



Sustainability

We are conscious of the impact our work has on the environment. We work with customers to provide clean, efficient, healthy, and effective solutions on all projects.

Delivering the largest and most complex APD projects in North America



Turcot Interchange & Roadway Construction
Montréal, Québec, Canada | CAD\$1.6 Billion

Regina Bypass

Regina, Saskatchewan, Canada

Owner: Saskatchewan Ministry of Highways & Infrastructure

Project Value: CAD\$1.2 Billion

Parsons' Roles

- Developer/Equity Investor
- Joint Venture Partner
- Lead Designer

Project Details

Parsons is a fully integrated partner in the consortium to design, construct, finance, operate, and maintain the bypass of the city of Regina, the provincial capital of Saskatchewan, Canada. The bypass is the largest transportation project in Saskatchewan's history and the first transportation P3 project in the province. It includes more than 58 kilometers of highway, of which 40 kilometers is new four-lane highway. The project will provide for a free-flow highway corridor through the Regina region and entails 11 new interchanges, multiple bridges, roundabouts, and railway flyovers.



Ohio River Bridges

Kentucky/Southern Indiana, USA

Owner: Indiana Department of Transportation/
Kentucky Transportation Cabinet

Project Value: \$2.3 Billion

Parsons' Roles

East End Crossing Project (Lewis and Clark Bridge)

- P3 Design-Build-Finance-Operate-Maintain Technical Advisor
- P3 Owner's Technical Team

Ohio River Bridges Overall Project

- General Engineering Consultant
- Toll System Advisor

Project Details

This bi-state project included the design and construction of the new Abraham Lincoln and Lewis and Clark bridges across the Ohio River, plus the renovation of the existing Kennedy Bridge. In addition, the interchange at Spaghetti Junction (I-64, I-65, and I-71) was reconfigured and the SR 265/SR 62 interchange was reconstructed. New four-lane extensions were built for SR 265 and the Gene Snyder Freeway (KY-841), including a 1,700-foot-long twin-bore tunnel under a historic Kentucky property. The project recently received an Envision® Platinum Award from the Institute for Sustainable Infrastructure for exceptional achievements in sustainable infrastructure design, construction, and operations.



Downtown Tunnel/Midtown Tunnel/ Martin Luther King Extension

Norfolk and Portsmouth, Virginia, USA

Owner: Virginia Department of Transportation

Project Value: \$2.1 Billion

Parsons' Roles

- General Engineering Consultant (GEC)
- Joint Venture Managing Partner for GEC

Project Details

Five project components were bundled into a single design-build-finance-operate-maintain P3. Parsons is the managing partner of the Southeastern Transportation Partners joint venture, which is serving as the program management consultant to the Virginia Department of Transportation. The Elizabeth River Tunnels Project involves the rehabilitation of both the Downtown and Midtown Tunnels, construction of a new two-lane immersed-tube tunnel adjacent to the existing Midtown Tunnel, modifications to the Brambleton Avenue/Hampton Boulevard interchange in Norfolk, and a 1.2-mile extension of the Martin Luther King Freeway in Portsmouth. Responsibilities include design review, environmental permits/mitigation, right-of-way and utility oversight, traffic management, public affairs, safety, construction management, disadvantaged business enterprise outreach, and financial/P3 management.



Goethals Bridge Replacement

**Staten Island, New York,
To Elizabeth, New Jersey, USA**

Owner: Port Authority of New York and New Jersey (PANYNJ)

Project Value: \$1.5 Billion

Parsons' Role

- Lead Designer

Project Details

Parsons is the lead designer for the \$1.5 billion replacement of the Goethals Bridge. To advance the implementation and delivery of the replacement of the Goethals Bridge, the Port Authority opted for a public-private partnership (P3) contract to design, build, finance, and maintain the new bridge. This is the agency's first use of a P3 on a bridge. The proposed replacement includes twin 7,300-foot structures with 900-foot cable-stayed main spans. The design accommodates potential future mass transit and utilizes state-of-the-art smart bridge technology.



Northwest Corridor Express Lanes

Atlanta, Georgia, USA

Owner: Georgia State Road and Tollway Authority

Project Value: \$604 Million

Parsons' Role

- Lead Designer

Project Details

The Northwest Corridor is the largest transportation project in Georgia's history and the first project to be procured by the Georgia Department of Transportation (GDOT) as a design-build-finance P3. This urban freeway project includes the design and construction of 29.7 miles of reversible toll lanes along interstates 75 and 575 through Cobb and Cherokee counties in metropolitan Atlanta. The scope of work also includes implementation of an intelligent transportation system for automatic traffic control and traffic monitoring, as well as design and construction of tolling gantries, 39 bridges, 100 retaining walls, and 120 overhead sign structures. The project team of GDOT, the State Road and Tollway Authority (SRTA), Northwest Express Roadbuilders, and Parsons saved approximately \$110 million in project costs through innovative designs, construction techniques, and alternative technical concepts. The innovative design allowed GDOT and SRTA to significantly reduce the amount of right-of-way purchased and shorten the schedule.



Viva Rapid Transit System

York Region, Ontario, Canada

Owner: York Region Rapid Transit Corporation

Project Value: CAD\$1.8 Billion

Parsons' Roles

- Planner
- Civil Design Lead
- Preliminary Design Engineer
- Detail Design Engineer
- Architectural Design Lead
- Deputy Project Director

Project Details

The Viva Rapid Transit System is a planned 90-kilometer rapid transit network with dedicated center median rapidways and mixed-traffic corridors to serve the southern York region, including three north-south connectors from the southern regional boundary to link to Toronto's subway system. Bus rapid transit and future light rail transit will complement the region's local bus service and an expanded Toronto Transit Commission subway and GO Transit commuter rail network. The project is being executed in multiple phases and involves the design and construction of transit stations, rapidways, and subway extension interfaces. The transit network is funded through an alternative financing and procurement process and is being built using design-build methods.



O'Hare Airport Transit System Expansion

Chicago, Illinois, USA

Owner: City of Chicago

Program Value: \$310 Million

Parsons' Roles

- Sole Prime Contractor
- Construction Manager
- Traction Power, Communications, and Trackwork Designer
- Systems Integrator and Commissioning Engineer

Project Details

Parsons is managing construction at O'Hare International Airport for the replacement of the airport transit system between terminals with a 3-mile, dual-lane, fully automated driverless rail system, plus an extension to the newly consolidated rental car station. The design-build project also includes an expansion of the maintenance and storage facility and the replacement of railcars, which will be fitted with improved automated vehicle control, traction power, and communication systems. Parsons is self-performing the design of the traction power, communications, and trackwork, while executing systems integration and commissioning work for the entire project.



I-15 Cajon Pass Rehabilitation

San Bernardino, California, USA

Owner: California Department of Transportation

Project Value: \$118 Million

Parsons' Roles

- Joint Venture Partner
- Lead Designer
- Quality Management Oversight Engineer

Project Details

Parsons, as part of the construction joint venture, reconstructed 48 lane-miles of the I-15 freeway. The work involved repairing existing Portland cement concrete pavement (PCCP) by replacing two outer lanes, asphalt concrete shoulders, and asphalt concrete patched areas with 40-year rigid pavement. It also included grinding and random slab replacement of the inside lanes with rigid pavement, milling and overlaying the existing asphalt concrete ramps, constructing PCCP ramp termini, and upgrading the recommended highway appurtenances and facilities. The project won a Silver Success in Motion Partnering Award from the California Department of Transportation District 8.



Foothill Gold Line Extension Phase 2A

Los Angeles, California, USA

Owner: Metro Gold Line Foothill Extension Construction Authority

Project Value: \$487 Million

Parsons' Roles

- Joint Venture Partner
- Lead Designer
- Safety System Certification
- Requirements Management
- Systems Integration Engineer

Project Details

This award-winning design-build project involved 11.5 miles of double mainline track and all related structures and systems. Facilities design included six new at-grade passenger stations and a 132,000-square-foot LEED® Gold maintenance/operations facility—currently the only building of its kind to receive this distinction for the highest level of achievement in sustainable design. Parsons also designed 3.8 miles of track and three bridges for the BNSF Railway. Two existing BNSF bridges were salvaged and moved to new alignments. Systems design included traction power elements and an overhead contact system comprising the traction electrification system, a light rail train control/signaling system, and communications.



Dulles Corridor Metrorail (Silver Line) Phase 2

Fairfax & Loudoun Counties, Virginia, USA

Owner: Metropolitan Washington Airports Authority

Project Value: \$1.18 Billion

Parsons' Role

- Lead Designer

Project Details

Parsons is responsible for the design and construction phase services of Phase 2 of the Silver Line extension to Dulles International Airport and beyond. The project involves an 11.4-mile segment of at-grade and elevated double-track rail, systems, six transit stations, and roadway improvements from Reston, VA, through the airport, into Loudoun County, VA. This design-build project runs in the central median of a multi-lane, limited-access highway system and includes significant modification to the adjacent highways and construction of elevated bridges. The combination of phases 1 and 2—totaling 23 miles—is currently the largest public infrastructure project in the United States, with a cost of more than \$6 billion.



Houston METRO Light Rail Expansion

Houston, Texas, USA

Owner: Metropolitan Transit Authority of Harris County

Project Value: \$1.26 Billion

Parsons' Roles

- Joint Venture Managing Partner
- Systems Integration Engineer

Project Details

As managing partner of the design-build joint venture, Parsons was responsible for designing and building the expanded light rail transit (LRT) system, which includes three new rail lines totaling 15 miles of LRT, 24 stations, and new storage and inspection facilities. The joint venture was also responsible for system safety and operational upgrades to the existing 7.5-mile LRT system and major renovations to the existing operations center. In addition, Parsons was responsible for overall project oversight, the acquisition and commissioning of 58 new LRT vehicles, and the community outreach and small business programs. For its work on the project, Parsons received an award of excellence for civil construction management from the Associated General Contractors of America.



Fore River Bridge Replacement

Quincy and Weymouth, Massachusetts, USA

Owner: Massachusetts Department of Transportation

Project Value: \$250 Million

Parsons' Role

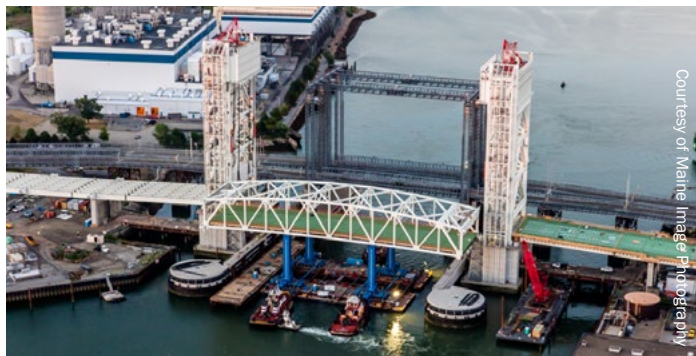
- Lead Designer

Project Details

The Fore River Bridge is a vertical lift bridge carrying Route 3A between Quincy and Weymouth, MA. In both the east and west directions, the new bridge will feature two 12-foot traffic lanes, a bicycle lane, and a sidewalk. The design-build project will increase the channel width from 175 feet to 250 feet. The vertical clearance will vary from 60 feet 7 inches in the closed position to 175 feet 7 inches in the open position. The steel framing for the 324-foot-long movable center span of the bridge—weighing nearly 3 million pounds—was built in the former Fore River shipyard and then transferred to barges with self-propelled modular transporters and jacked to an elevation 60 feet above the water. The span was led by tug boats three-quarters of a mile downriver and positioned between the two bridge towers. After the addition of the concrete deck, the movable span now weighs more than 5 million pounds. The completed structure will be clad in a stainless steel mesh that will be illuminated with aesthetic lighting. The bridge will serve as a gateway to the Massachusetts south shore.



Courtesy of Maine Image Photography



Courtesy of Maine Image Photography

I-35E Managed Lanes Phase 1

Dallas to Denton, Texas, USA

Owner: Texas Department of Transportation

Project Value: \$1.07 Billion

Parsons' Roles

- Lead Design Joint Venture Partner
- Design Management
- Roadway
- Structures
- Maintenance of Traffic
- Aesthetics

Project Details

Parsons is lead design joint venture partner for the 28-mile I-35E corridor improvement project between Dallas and Denton, TX. The project features one additional lane in each direction, plus two reversible managed toll lanes. The design team submitted multiple alternative technical concepts, the most significant of which saved more than \$50 million and reduced the construction schedule by nine months. Parsons' design considered future work on the corridor that is contingent upon available funds, helping the customer meet its needs for today while planning cost-effectively for the future.



SH 183 Managed Lanes (Midtown Express)

Dallas and Fort Worth, Texas, USA

Owner: Texas Department of Transportation

Project Value: \$848 Million

Parsons' Role

- Lead Designer

Project Details

State Highway 183 serves as a primary artery between Dallas and Fort Worth, TX. Parsons serves as lead designer for Phase 1 of this design-build project to increase the capacity of SH 183 and portions of SH 114 and Loop 12 with the addition of one managed toll lane in each direction. The project consists of improvements along SH 183, SH 114, and Loop 12 from SH 121 to I-35E in Tarrant and Dallas counties. It involves constructing managed lanes, general-purpose lanes, frontage roads, ramps, and connecting roadways, plus intelligent transportation systems and electronic toll collection infrastructure along SH 183 and SH 114.



SAWS Desalination Facility

San Antonio, Texas, USA

Owner: San Antonio Water System

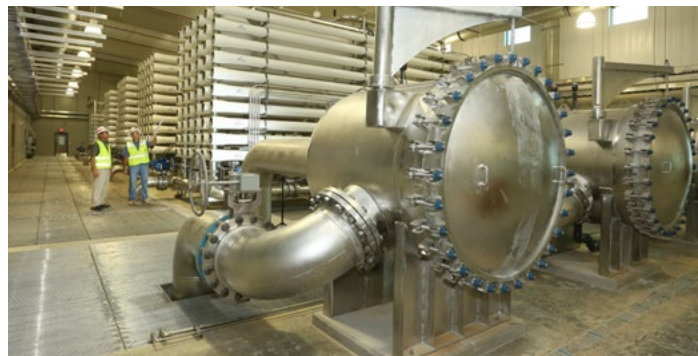
Project Value: \$119 Million

Parsons' Role

- Joint Venture Construction Manager at-Risk

Project Details

The San Antonio Water System (SAWS) brackish groundwater desalination project transforms brackish water from the Wilcox Aquifer in southern Bexar County, TX, into millions of gallons of drinkable water using reverse osmosis. The work included preconstruction phase services; drilling and fitting out four new production wells and one new injection well; and fitting out eight existing production wells, an existing injection well, and six monitoring wells. In addition, the joint venture partners built a raw water conveyance system and constructed all program components and a new administration building. The team also constructed the operating treatment plant and operated it for three months.





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