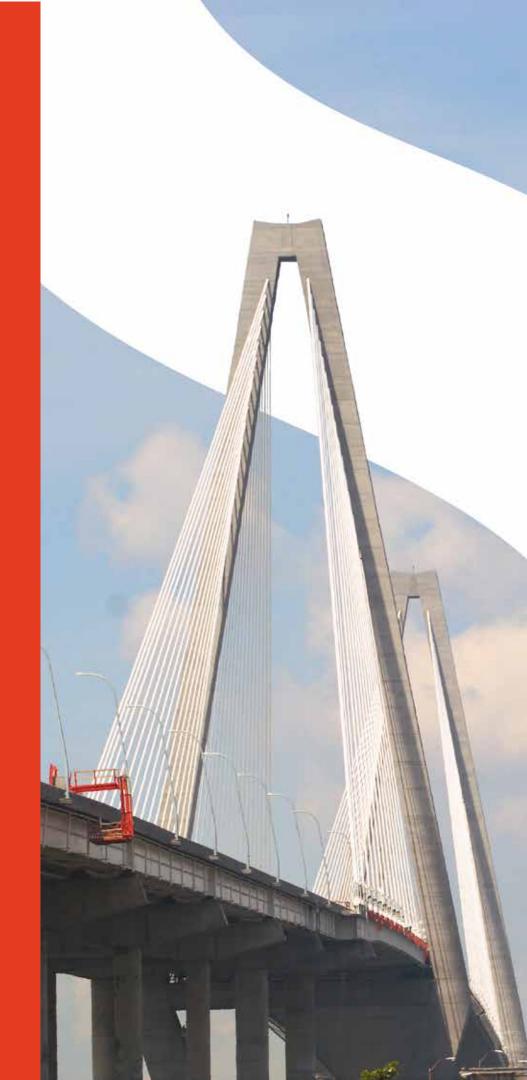
Bridges

Signature Crossings





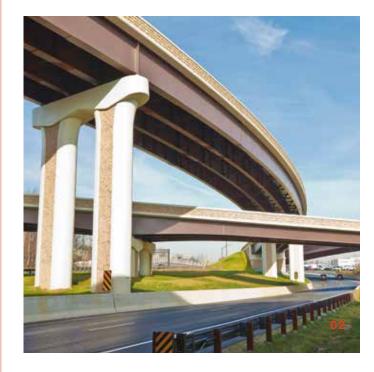
Bridges: From Inception to Inspection

WSP USA (formerly WSP | Parsons Brinckerhoff) has led the development, rehabilitation and inspection of thousands of bridges across the U.S. for more than a century. These structures reliably move automobile and train traffic, often as part of larger road and rail systems. Many are iconic structures that are admired for their monumentality and grace, serving as symbols of their communities. To every bridge project—whether a routine viaduct over a roadway or an awe-inspiring span of a mighty river— WSP brings the same commitment to excellence that has characterized our work on some of the world's most notable bridges.

Capabilities

Our capabilities are comprehensive, ranging from feasibility studies and environmental permitting, through preliminary and final design, to construction management and inspection. We offer specialized services such as seismic retrofit and rehabilitation design in addition to overall program management on behalf of an owner. Our experience includes steel and concrete bridges, as well as state-of the-art thermoplastic and fiber-reinforced polymer (FRP) bridges. We have designed and managed the construction of all types of bridges as well as multilevel highway interchanges.

Our assignments range in size and scope from simple studies and assessments to complex multibillion-dollar multidisciplinary efforts—and in every case we are committed to responding to our clients' needs with cost-effective, sustainable solutions that promote safe and efficient travel.



- **01 Pearl Harbor Memorial Bridge** New Haven, Connecticut
- **02** Intercounty Connector Maryland



Our Capabilities

O3 American Tobacco Trail Bridge Durham, North Carolina

04 DFW Connector Dallas/Fort Worth, Texas

From feasibility studies through operations, WSP's bridge specialists serve clients with an array of services to guide any type of bridge project from conception to completion.

Expertise in All Types of Bridges

Long-span

- Cable-stayed
- Suspension
- Arch
- Truss
- Extradosed

Movable

- Bascule
- Lift
- Floating
- Swing

Segmental

- Concrete, Steel and Composite
- Precast and Cast-in-Place
- Post-Tensioned

Bridge Asset Management

- Strategic Planning
- Management andProcess Optimization
- Financial and Economic Controls and Forecasting
- Engineering Design, Analysis,
 Inspection, Testing/Evaluation
- Data Management
- Risk Management
- Bridge Inspections

Specialty Expertise

- Accelerated Bridge Construction
- 3D Modeling and Bridge
 Information Modeling (BrIM)
- Bridge Materials and Service
 Life Design
- Bridge Research and
 Specification Development

Comprehensive Services

Planning & Environmental

- Environmental Impact Statements
- River and Tidal Behavioral Studies
- Traffic and Revenue Studies
 Conceptual Design
- 3D Visualization

Design

- Preliminary and Detailed Design
- Design-build Documents
- Value Engineering
- Advanced Structural Analysis
- Linear and Non-Linear Analysis
- Post-Tensioned Concrete Analysis
- Failure/Forensic Analysis
- Earthquake Engineering/Seismic Retrofit
- Ship Collision Studies
- Geotechnical and Hydraulic Analyses
- 3D and Bridge Information Modeling (BrIM)
- Third-Party Quality Review

Program and Construction Management

- Construction Engineering
- Contract Administration
- Quality Assurance/Quality Control
- Project Controls
- Constructability Review
- Claims Management
- Cost Estimating
- Resident Technical Inspection
- Inspection and Rehabilitation
- Value Engineering

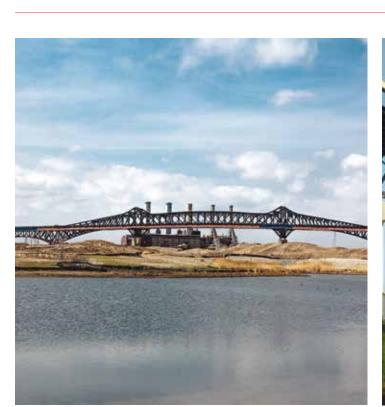
Inspection, Maintenance and Operations

- Condition Inspections
- Rating and Evaluation Studies
- Traffic Maintenance Plans
- Design for Emergency Repair
- Design for Rehabilitation
- Preservation Management Plans
- Structural Health Monitoring
- Non-Destructive and Remote Testing and Inspection
- Staged Replacement Plans





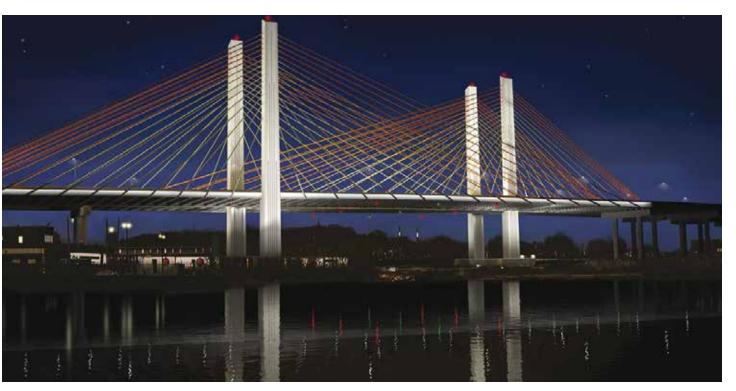
Pensacola Bay Bridge Pensacola, Florida Design



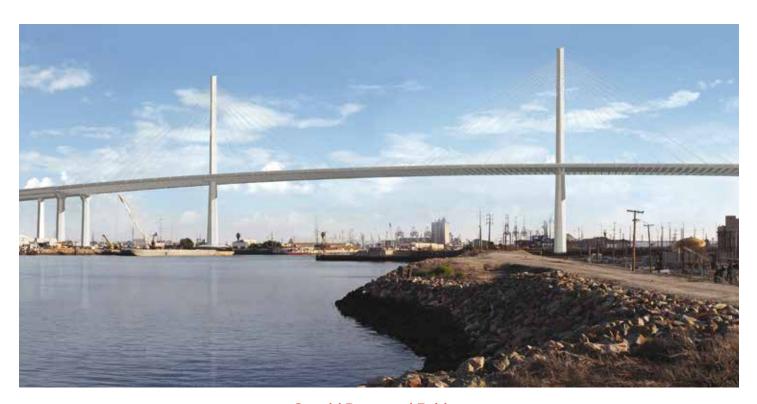
Pulaski Skyway Rehabilitation Jersey City, New Jersey Design



John A. Blatnik Bridge Duluth, Minnesota Inspections; Design; Asset Management



Kosciuszko Bridge New York, New York Planning; Design; Construction Services



Gerald Desmond Bridge
Long Beach, California
Program and Construction Management



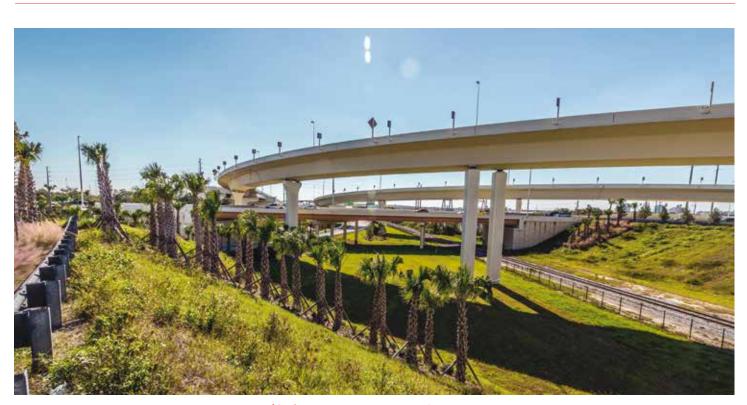
Bayonne Bridge Navigational Clearance Project Bayonne, New Jersey and Staten Island, New York Planning, Design and Construction-Phase Services



Evergreen Point Floating Bridge (SR 520)
Seattle, Washington
Program and Project Management Services; Preliminary Engineering; Constuction Oversight



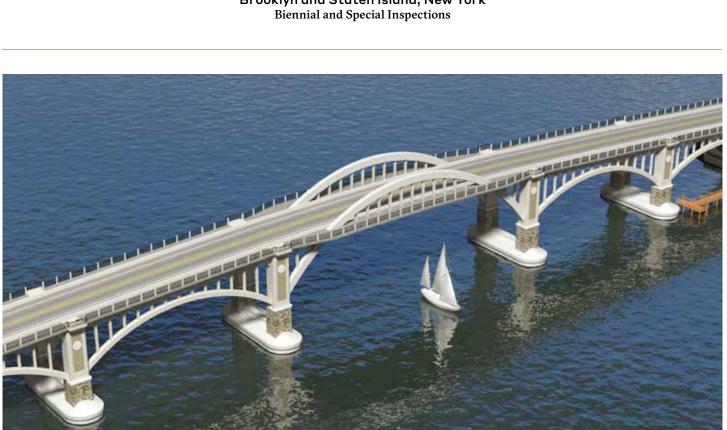
East Span, San Francisco-Oakland Bay Bridge San Francisco, California Civil and Roadway Design



I-4/Selmon Expressway Connector Tampa, Florida Designer, Engineer of Record



Verrazano-Narrows Bridge Brooklyn and Staten Island, New York Biennial and Special Inspections



Veterans Memorial Bridge Daytona, Florida Design



John's Pass Bridge Madeira Beach, Florida Environmental, Preliminary and Final Design Services



Bronx-Whitestone Bridge
Bronx, New York
Biennial and Special Inspections; Feasibility Study;
Construction Management



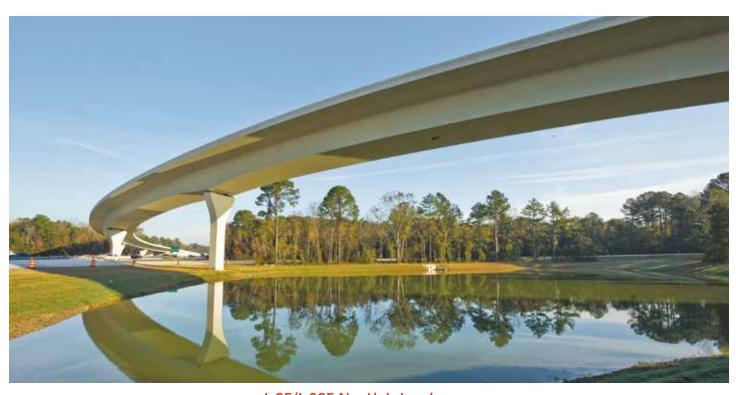
I-5 Skagit River Bridge Replacement Mount Vernon, Washington Design



Bear Tavern Road and Jacobs Creek Road Bridges Mercer County, New Jersey Design



Wells Street Bridge Rehabilitation Chicago, Illinois Construction Engineering



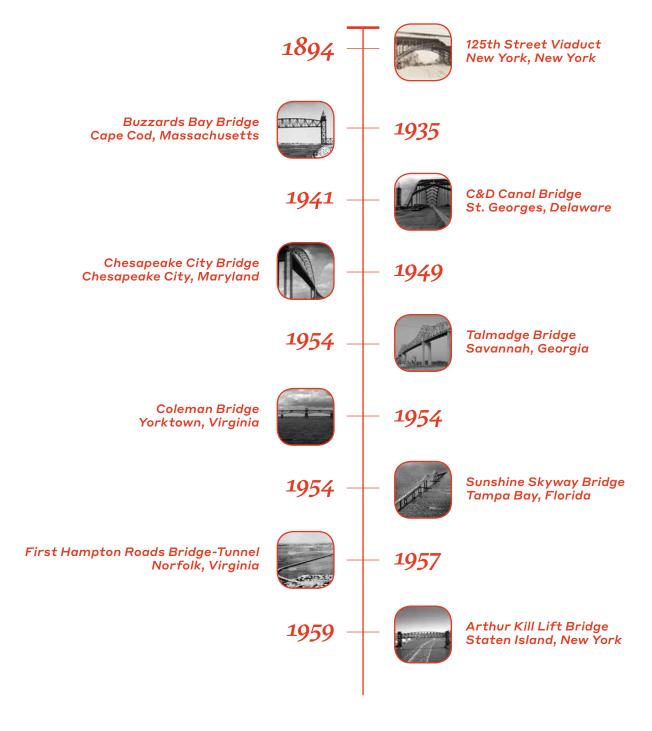
I-95/I-295 North Interchange Jacksonville, Florida Designer, Engineer of Record



Gilmerton Bridge Chesapeake, Virginia Construction Engineering and Inspection

More than a Century of Bridge Engineering

WSP has designed some of the most iconic bridges in the United States since the firm's founding in 1885. Many have become household names, well known to generations of travelers. In some cases WSP worked on the original structure as well as a replacement structure several years later, and the firm has worked for many of the same clients for decades.







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WSP USA is the U.S. operating company of WSP, one of the world's leading engineering and professional services firms. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals. WSP USA designs lasting solutions in the buildings, transportation, energy, water and environment markets. With more than 7,000 people in 100 offices across the U.S., we partner with our clients to help communities prosper. www.wsp.com