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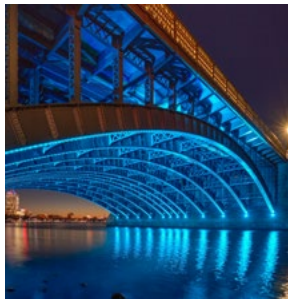
ENDURING. DRIVEN. VISIONARY.

# HIGHWAYS & BRIDGES





STV's bridge and highway assignments traverse major metropolitan areas, cities and towns as well as rural corridors. Reflecting the tenets of smart growth and sustainable development, our context-sensitive solutions mitigate the effects of urbanization and sprawl. With the growing emphasis on design-build procurement and privatization, we work hand-in-hand with government agencies, contractors and developers. The firm's portfolio of projects includes fixed and movable bridges, long-span and complex bridges, and simple structures and viaducts. Highway projects encompass route alignment planning, interchange development, road relocations, toll plazas, drainage and storm water management, traffic modeling, and noise impact evaluation. Our expertise covers all aspects of highway and bridge engineering, including planning, design, condition inspection, construction support and resident engineering and inspection services.



All Photos © Mark Flannery

## PLANNING, STUDIES & ANALYSES

Planning studies and investigations set the stage for an effective design process. The firm's diverse services consist of needs assessments, conditions and feasibility studies, route alignment, traffic calming, environmental studies, and traffic analyses and forecasting—all of which shape design. STV also develops planning studies for complicated bridge rehabilitation and replacement projects, focusing on initial and long-term costs. By involving the community during this early stage, we help to foster public acceptance.





DDOT New York Avenue/South Dakota Avenue Interchange Study, Washington, DC



*PennDOT I-95 Betsy Ross Interchange, Philadelphia County, PA*



*MDTA Section 100 I-95, Baltimore County, MD*



*PennDOT Central Susquehanna Valley Thruway Northern Section, Pennsylvania*

## HIGHWAYS & ROADS

STV designs roads and highways for all types of traffic needs in varied environments, from densely urban to extremely rural. Our approach considers traffic, geometrics and aesthetics, as well as community, environmental and historic preservation needs. The firm's team of experts handles all aspects of highway design, such as roadway geometrics, drainage, utilities, signals, lighting, safety and traffic maintenance. In addition to offering full in-house planning and design services, we perform traffic and pedestrian modeling, constructability reviews, and life-cycle cost analyses.



NCDOT I-485/I-85 Turbine Interchange, Charlotte, NC

## BRIDGES & STRUCTURES

STV designs fixed and movable, long-span, and complex bridges of all types for highway and rail clients across the United States. We also provide condition inspection, resident engineering, rehabilitation and construction support services across the same project spectrum. For existing bridges in need of rehabilitation or replacement, STV has bridge specialists with expertise in load rating and modeling, fatigue analysis, seismic analysis, geotechnical studies, and non-destructive testing, as well as scour analysis and scour mitigation. With an extensive portfolio of various bridge types, we have the capacity to deliver bridge engineering of the highest quality.



*MassDOT Fore River Bridge Replacement, Quincy, MA*

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*SCDOT Fantasy Harbour Bridge, Myrtle Beach, SC*

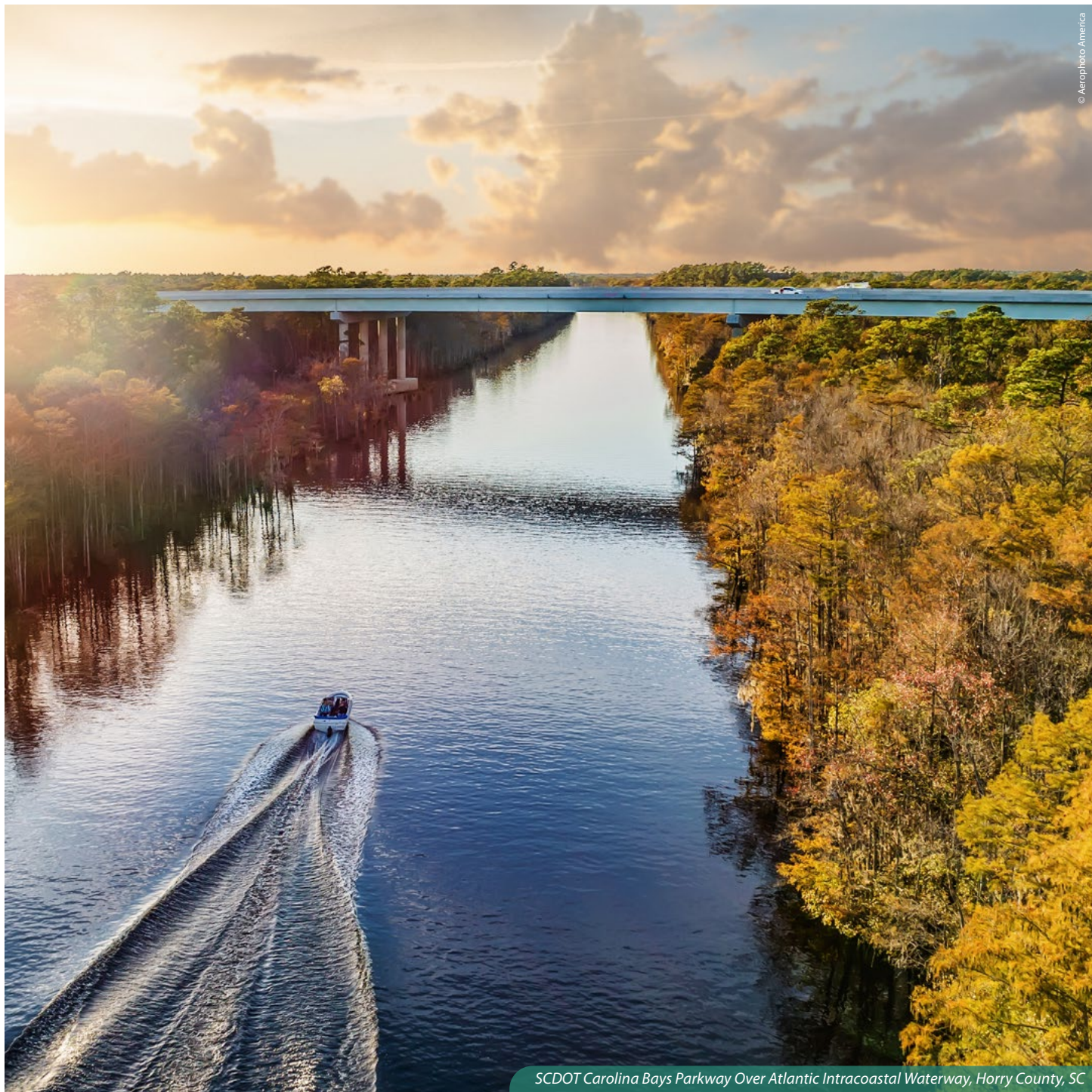
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*MassDOT Fanny Appleton Pedestrian Bridge, Boston, MA*

© Mark Flannery





SCDOT Carolina Bays Parkway Over Atlantic Intracoastal Waterway, Horry County, SC

## TOLL SYSTEMS, ITS INFRASTRUCTURE & SUPPORT FACILITIES

Transportation infrastructure includes the systems and facilities that support safe and convenient travel. STV has total in-house capability to develop and design toll plazas, administrative buildings and maintenance areas that promote efficient highway and bridge operations. We have provided services for enhanced traffic management, Intelligent Transportation Systems, intermodal transportation centers and park-and-ride facilities, all of which have grown in number throughout the country. STV has also supported the integration of related amenities such as bikeways, pedestrian facilities and recreational areas into existing transportation corridors to form comprehensive infrastructure systems.



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Pennsylvania Turnpike Commission Valley Forge Toll Plaza & Interchange, King of Prussia, PA

## CONSTRUCTION SUPPORT, RESIDENT ENGINEERING & INSPECTION

STV's full-service construction inspection capabilities are available for projects covering the entire spectrum of transportation needs. Our clients benefit from our expertise in running successful field programs of all sizes, and our experience in managing people, monitoring quality, and tracking quantities, costs and schedules in a safe, secure construction environment. Our resident engineers have managed construction projects for a wide array of public and private clients across the country.





NYS DOT Kosciuszko Bridge Replacement Design-Build Construction Quality Assurance Services, New York, NY





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