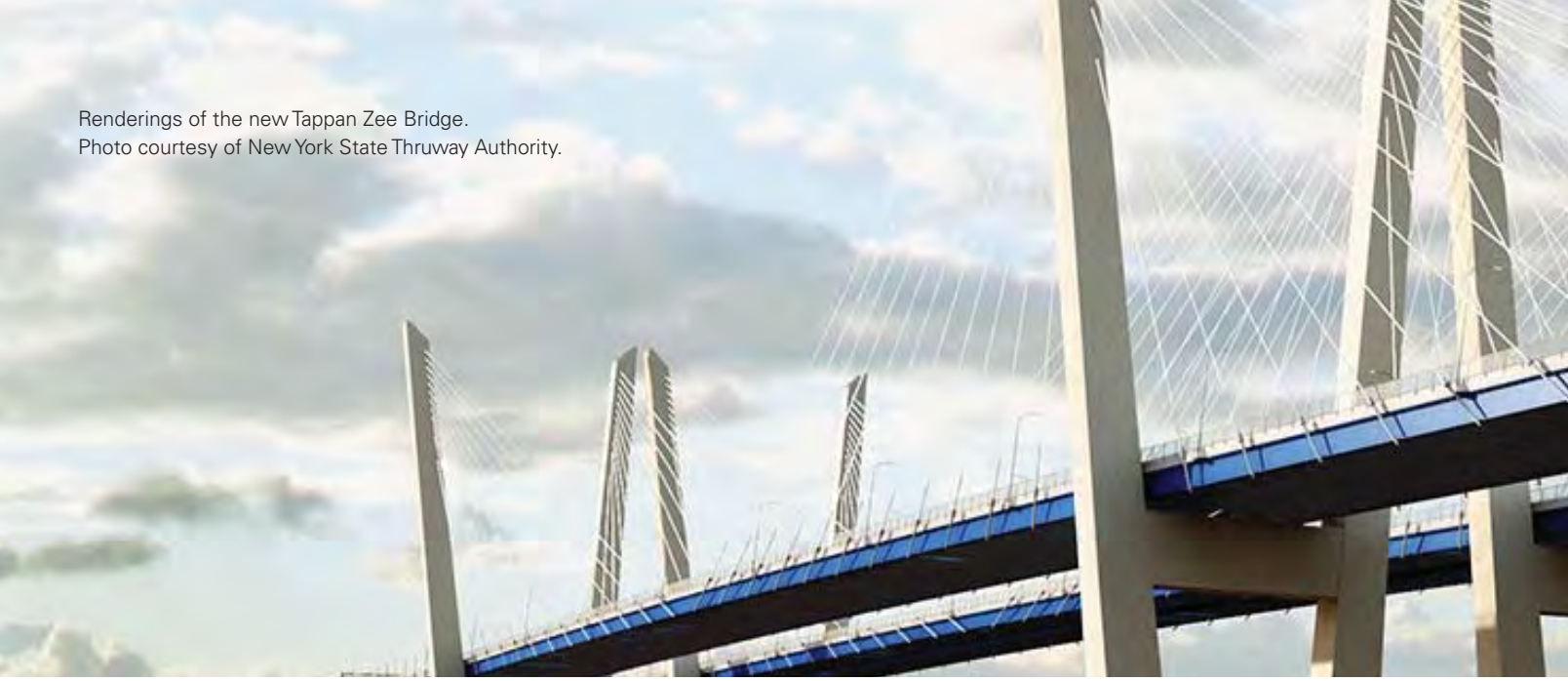

Renderings of the new Tappan Zee Bridge.
Photo courtesy of New York State Thruway Authority.

BUILDING AMERICA'S BACKBONE

by Jonathan Hirschfeld

Nestled in the Blue Ridge Highlands region of the Appalachian Mountains is an area rich in outdoor recreation with biking, hiking, and fishing. Long scenic drives following the settlements scattered throughout the area take you along highways and bypasses filled with wide mouth river crossings, tree lined miles and blankets of bluegrass lining the mountainous terrain. Southwest Virginia is known for its outdoor experiences, but this area is also home to another contributor to quality of life: manufacturing jobs.

With a long history deeply rooted in coal mining and cash crop farms, the area's strong workforce community is an established cornerstone providing ample skilled workers and high quality results. According to the Virginia Manufacturers Association, the state's 5,000+ manufacturers employ over 200,000 individuals and contribute $34 billion to the gross state product, accounting for over 80 percent of the state's exports to the global economy.

At the Hirschfeld Industries plant, located between Abingdon and Bristol, there are 70 employees busy at work, fabricating steel girders for bridge superstructures. In a literal sense, the plant provides the backbone of highway and rail bridges. Our Virginia plant is resilient, too, despite multiple recessions and industry bankruptcies, our quality workforce has churned out bridge girders without interruption for 60 years.

"The manufacturing of goods has long been the foundation of jobs for American workers," said Congressman Morgan Griffith (R-Va.), who represents the region that is home to our Virginia plant. "Hirschfeld Industries and other manufacturers are key to both the local and national economies, and also create thousands of jobs for those living nearby. For our nation to remain competitive long-term in the global economy, we must ensure that American companies like Hirschfeld Industries remain able to efficiently develop and manufacture products here at home, thus continuing to be a source of good-paying jobs."

The strength of our Virginia plant highlights our industry's lean and efficient manufacturing practices to weather the down markets and scale up when transportation construction investment expands. Such an opportunity came our way with The new N.Y. Bridge, a monumental project that will revitalize the existing Governor Malcolm Wilson Tappan Zee Toll Bridge that connects Rockland County to Westchester County, crossing the Hudson River at one of its widest points.

The new N.Y. Bridge, designed to last 100 years without major structural maintenance, is made possible by the coming together of two U.S. competitors in the manufacturing and steel industry. In total, Tappan Zee Constructors, LLC (and a consortium of some of the world's best-known and highly-regarded design, engineering and construction firms, including Fluor, American Bridge, Traylor Bros. and Granite) is utilizing the East Coast manufacturing strength from a joint marketing partnership forged by Hirschfeld Industries and High Steel.

Hirschfeld's Abingdon, Va. plant. Photo courtesy of Hirschfeld. Photographer: Jennifer Jernigan.

Designed to carry up to 100,000 vehicles each day across eight traffic lanes and slated for completion in 2018, the new N.Y. Bridge will continue in the spirit of the Tappan Zee Bridge as a vital artery for residents, commuters, travelers and commercials traffic. It will also have a dedicated commuter bus lane and will accommodate bus rapid transit, light rail or commuter rail, as well as a bike and pedestrian path. The $3.1 billion innovative design of the 3.1-mile twin span cable-stayed bridge with angled main span towers will reach completion in a little over five years.

The winning steel design minimized dredging and piers for the 350-foot American-made steel girder approach spans. The new N.Y. Bridge will be lighter, and the modular assembly will offer the safest and most expedited construction of a project of this size so far in the industry.

"As the largest fabricator of steel bridges in the United States, we are proud to come together with other leaders in the industry to complete this immense task," said Wendall Hirschfeld, vice president of business development at Hirschfeld Industries.

There are more than 10 best-in-class bridge fabrication facilities along the East Coast demonstrating the strength of the U.S. Steel fabrication industry and taking on large scale projects like the new N.Y. Bridge, which will be the single largest bridge construction project in state history. Tappan Zee Constructors is allocating a portion of these facilities to provide the bridges required for the five-year project. The availability of U.S. Steel manufacturing provides the means for HDR, TZC's Engineer, to turn design into reality—and constructability.

Since the turn of the 20th century, steel has been basic to the world's industrial economy. As a company that can trace its roots all the way back to 1919, Hirschfeld has experienced impressive growth and diversification to become one of North America's premier fabricators of structural steel components used in complex, large-scale industrial, commercial and bridge applications.

Fabricating more than 100,000 tons of steel annually, we are known for our work in a wide range of end markets including transportation infrastructure, industrial development, commercial construction and power generation. With 11 facilities from the Southwest to the East Coast, providing a national presence and an industry-leading footprint, Hirschfeld is a major participant in the expansion and redevelopment of the U.S. transportation and energy infrastructure systems and the new N.Y. Bridge is part of that story.

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