BRIDGE CONSTRUCTION MARKET OPPORTUNITIES

Highway Trust Fund Fix Focus of May Federal Issues Program & TCC Fly-In
Brand New
Highway Class Paver
SUPER 2000-3i.

ON THE COVER
14 Bridge Construction Market Report

FEATURES
13 Safety Certification for Transportation Project Professionals Program Update
20 Snapshot of U.S. Transportation Improvement Projects
24 Bridge Steel Fabrication
29 Q&A with Transportation Investment Advocate Juva Barber

IN EVERY ISSUE
From the Chairman, p.6
From the President’s Desk, p.8
In Case You Missed It, p.11
Regulatory Roundup, p.30
AEM Corner, p.33
The Last Turn, p.34

What we have so far are rhetorical flourishes. You need to keep the pressure on to be sure it happens. To assume this is just going to happen overnight is a big, big mistake.”

-- ARTBA President Pete Ruane, speaking March 8 on the CONEXPO-CON/AGG 2017 show floor in Las Vegas, on President Trump’s promise to invest in infrastructure.

Improve Safety. Save Time. Reduce Setup, Lane Closures & Congestion.
Highly mobile with power, lights and other options including crane and bucket. For right or left work at lengths to over 100’. Carries materials and supplies to 85,000 lbs. Purchase, lease or rent.

Cover photo from newnybridge.com.
“Transportation Builder” (TB) is the official publication of the American Road & Transportation Builders Association, a federation whose primary goal is to aggressively grow and protect transportation infrastructure investment to fuel the public and business demand for safe and efficient travel. In support of this mission, ARTBA also provides programs and services designed to give its members a pivotal competitive edge. TB’s primary source of business, legislative, regulatory, safety and economic news that matters most to transportation development professionals.

EDITOR’S NOTE
MARK HOLAN | Editorial Director

The Reminder from Atlanta

T he March 31 collapse of an Interstate 85 bridge in Atlanta became a dramatic “reminder of how many motorists depend on busy bridges in the middle of cities,” the Associated Press reported.

This streugh of highway normally carries 250,000 vehicles per day. Traffic in both directions had to be detoured in the immediate aftermath of the fire that caused the bridge to crumble, which was being investigated as arson.

The bridge was in good shape, according to a 2015 inspection. It was not among the nation’s nearly 56,000 structurally compromised bridges, which ARTBA detailed in a February report. These bridges are crossed 165 million times daily! If you haven’t done so already, please review ARTBA’s fourth annual analysis at www.artabridgeportal.org.

In this issue, ARTBA Chief Economist Dr. Alison Premo Black takes the report the next step with a tip sheet on what we can do to improve the repair and replacement of these troubled structures. These projects are important market opportunities for ARTBA members. Jonroop approved and potential future increases in state funding should help add to the bridge project pipeline.

In addition to bridges, the industry is also committed to building new roads, public transit systems and airport infrastructure to spur the economy and improve our quality of life. Inside, you’ll find a quick snapshot at nine recent projects, which serve as a positive reminder of what’s already being done.

Our message to President Donald Trump and Congress is simple: Come up with a plan to fix the Highway Trust Fund and make new investments in this important work. We can’t foresee the next emergency, but we can get busy tackling plenty of needed transportation infrastructure projects.
After a turbulent and historic 2016 election season, President Donald Trump is in the White House and one-party control has returned to Washington for the first time since 2005.

Trump campaigned on the need for pumped-up infrastructure investment, and he even mentioned it in his inaugural address. But, it won’t just happen. We need to turn up the heat on Congress and the administration.

That’s why ARTBA’s Federal Issues Program (FIP) and the Transportation Construction Coalition (TCC) Fly-In, scheduled May 16-18 at the Hyatt Regency on Capitol Hill, are so important. This is your chance to communicate directly with your members of Congress on the need for action on this and other key transportation policy and regulatory matters.

Check out the FIP/TCC Fly-In program schedule on the following page and then register today!

Consider bringing several people from your firm or agency with you. A strong industry grassroots presence during this once-in-a-generation opportunity to boost infrastructure investment is critical to getting the job done right!

I look forward to seeing you in the Nation’s Capital this spring.

David Zachry
CEO, Zachry Corporation

TUESDAY, MAY 16

11 a.m.-Noon
Bridge Policy & Promotion Council
- Discuss the Council’s program of work and the association’s annual “Bridge Conditions Report.”

11:30 a.m.-12:30 p.m.
Public-Private Partnerships Division
- Gather intelligence on key transportation P3 projects and opportunities around the country, whether you are new to the P3 market or a veteran practitioner.

12:30-3 p.m.
Contractors Division Roundtable with Federal Highway Administration (FHWA)
- Learn more about the latest federal policy developments that will affect how contractors build projects, and provide your feedback to key FHWA officials.

Noon-2 p.m.
Executive Committee*
*Executive Committee members only

2-3 p.m.
Industry Leader Development Council
- Focus will be on 2017 action items, including planning for ARTBA’s four regional meetings and the annual Dr. J. Don Brock TransOvation® Workshop.

2-3:30 p.m.
Transportation Development Foundation Trustees*
*Trustees only

3:30-4 p.m.
Overview and Q&A: New Safety Certification for Transportation Project Professionals™ Program
- Learn more about this ground-breaking certification and have your questions answered.

3:15-4:30 p.m.
Joint Planning & Design, and Transportation Officials Divisions

3:30-5 p.m.
Nominating Committee*
*Nominating Committee members only

4:30-5:45 p.m.
Environmental Committee Meeting with Federal Agency Officials

TUESDAY, MAY 16 continued

5-6 p.m.
General Session: Women In Transportation
Construction Panel Discussion
- This panel, hosted by ARTBA’s Women Leaders Council, will feature an interactive discussion regarding best practices for recruitment and retention in the transportation construction industry.
- This session is open to all attendees

Council of State Executives*
*ARTBA chapter executives, staff and invited guests only.

WEDNESDAY, MAY 17

6:15-8 p.m.
Welcome Reception

7:30-9 a.m.
Contractors Division
- Features the semi-annual business meeting of ARTBA’s largest membership division, and includes presentations and discussion of key issues at the federal and state levels.

3:30-9:30 a.m.
Materials & Services Division

9:30-9:45 a.m.
Networking Break

9:45-11 a.m.
General Session
- Congressional Staff Panel
- Legislative Session & Regulatory Report
- Transportation Construction Market Report
- New Infrastructure Initiatives

11 a.m.-1 p.m.
Board of Directors

1-2:30 p.m.
Executive Committee*
*Executive Committee members only

2-3 p.m.
Industry Leader Development Council
- Focus will be on 2017 action items, including planning for ARTBA’s four regional meetings and the annual Dr. J. Don Brock TransOvation® Workshop.

3:30-4 p.m.
Overview and Q&A: New Safety Certification for Transportation Project Professionals™ Program
- Learn more about this ground-breaking certification and have your questions answered.

3:15-4:30 p.m.
Joint Planning & Design, and Transportation Officials Divisions

3:30-5 p.m.
Nominating Committee*
*Nominating Committee members only

4:30-5:45 p.m.
Environmental Committee Meeting with Federal Agency Officials

3:30-5 p.m.
Transportation Construction Foundation Awards Luncheon
- Presentation of the "ARTBA Award" and "Helping Hand" Awards

THURSDAY, MAY 18

7-8 a.m.
TCC Breakfast

8 a.m.-5 p.m.
TCC Meetings with Members of Congress

Meetings are open to all ARTBA members unless otherwise indicated in the program.
FROM THE PRESIDENT’S DESK
T. PETER RUANE

No “Irrational Exuberance” Here

Crumbling infrastructure will be replaced with new roads, bridges, tunnels, airports and railways gleaming across our beautiful land...

“Another Republican President, Dwight D. Eisenhower, initiated the last truly great national infrastructure program— the building of the interstate highway system. The time has come for a new program of national rebuilding...

“To launch our national rebuilding, I will be asking the Congress to approve legislation that produces a $1 trillion investment in the infrastructure of the United States—financed through both public and private capital—creating millions of new jobs.”

–President Donald J. Trump, Address to Congress, February 28, 2017

As transportation advocates, who among us WOULDN’T be excited by the new president’s bold declaration in his first major speech since Inauguration Day? And of course this was just the latest in a series of similar statements by President Trump, dating back to his campaign announcement in 2015.

So am I overcome by “irrational exuberance,” especially when I hear the “T-word” (for trillion)? Not a chance! Yes, it is heartening to hear a president make this kind of public commitment, but that trillion-dollar investment—or whatever the number—won’t magically materialize out of fairy dust.

As I write this column, there are questions yet to be answered about President Trump’s vision and intentions to include:

• What is meant by “infrastructure”? How much of the new investment will go towards improving the transportation infrastructure the nation needs so badly?
• What are the specifics of the “public and private capital” the president has referenced?
• Will this be real investment, or will there be creative accounting to include projects already underway or expedited in the numbers?

Since the November election, I have watched with bemusement as certain so-called “experts” have already declared victory and started marking time until this trillion-dollar windfall arrives. The thinking goes that since President Trump wants to do it, and his party controls Congress, then it will be a slam dunk.

For a dose of reality, start by reviewing the U.S. Constitution. Article I vests Congress with the power to make laws and appropriate funds. Article II imbues executive power with the president. The two MUST work together. If you want a recent example, look no further than the healthcare reform bill that crashed and burned in March. It just illustrated that getting “big things” done in the Nation’s Capital is very hard.

The president and congressional Republicans need a “win.” And a new opportunity has presented itself. They have moved on to tax reform, a scenario ARTBA has been anticipating for many months. Our message: any tax bill should include a permanent revenue solution for the Highway Trust Fund and robust new investment over and above that. (Remember, a separate infrastructure bill isn’t necessarily needed.)

Visit weilerproducts.com or the paving specialist at your Cat® dealer for more information.

Engineered Innovation for the Material Transfer Vehicle Market

• Designed around clean-out to simplify daily maintenance and increase component life
• Variable speed conveyors reduce wear
• Hydraulic conveyor chain tensioner automatically sets and maintains proper chain tension
• Automated tire spray down decreases tack build-up with programmable spray coverage
• Storage hopper management system notifies crew of material level in the storage hopper
• Cat® dealer sales, service and support
“What we have so far are rhetorical flourishes. You need to keep the pressure on to be sure it happens. To assume this is just going to happen overnight is a big, big mistake.”

--ARTBA President Pete Ruane, speaking March 8 on the CONEXPO-CON/AGG 2017 show floor in Las Vegas, on President Trump’s promise to invest in infrastructure.

OVERHEARD

NEW MEMBERS

CONTACT US FOR MORE INFORMATION, OR DEMONSTRATION, OR TRIAL!
A second group earned the Safety Certification for Transportation Project Professionals™ (SCTPP) credential in February, adding to the original 55 people featured in the January/February issue of Transportation Builder.

Launched in 2016, the SCTPP program is aimed at the thousands of transportation project workers, supervisors, foremen, inspectors, managers, manufacturers and materials suppliers, designers, equipment operators and owners who could make a huge, industry-wide safety impact by learning core competencies necessary to identify and mitigate potentially life-threatening, on-site risks. The certification is valid for three years.

The newest Safety Certified Transportation Project Professionals are:

- Adam Hill, safety coordinator, Road-Con Inc., West Chester, Pa.
- Bruce Drewes, instructional consultant, 3T Group, Boise, Idaho
- Doug Schultz, president, Herlihy Mid-Continent Company, Romeoville, Ill.
- Edward Mays, field safety coordinator, Barriere Construction LLC, Metairie, La.
- Francis B. Maline, project safety manager, Lane Construction, Westchester, Ill.
- Jose Manzano, safety inspector, CW Roberts Contracting, Tallahassee, Fla.
- Justin Templet, safety & claims coordinator, Barriere Construction, Metairie, La.
- Keith Clay, safety manager, John R. Jurgensen Company, Hamilton, Ohio
- Robert Medina, safety officer, Hellman Electric Corporation, Bronx, N.Y.
- Russell McElroy, senior safety supervisor, Lane Construction, Charlotte, N.C.
- Steven Ward, safety director, Advanced Workzone Services LLC, Muskogee, Okla.
- Tim Beguin, corporate safety director, Wiregrass Construction Co., Decatur, Ala.

The ARTBA Foundation has eight courses available at its Online Learning Center (OLC) that are increasingly being utilized to help people prep for the SCTPP exam. See the ad on the opposite page.

The SCTPP Study Guide also is proving to be a valuable tool for those taking the exam. It features:

- More than 20 practice test questions.
- Tips for taking the exam.
- What to expect on testing day.

The two-and-a-half hour SCTPP exam contains up to 120 multiple-choice questions that probe knowledge in: assessing project risks; creating project safety plans; implementing and conducting on-going evaluation of a site-specific operational safety plan; and conducting incident investigations.

It is designed to meet the rigorous protocols required for accreditation by the American National Standards Institute (ANSI) and the International Organization for Standardization ISO/IEC 17024: “Conformity Assessment: General Requirements for Bodies Operating Certification of Persons.”

Additional information about the SCTPP credential and the OLC can be accessed at: www.puttingsafetyfirst.org.
Nearly one of every three bridges in the United States needs significant repair work, according to ARTBA’s analysis of the Federal Highway Administration’s latest National Bridge Inventory (NBI) data. This includes 86,224 bridges that should be replaced, 79,386 that need major reconstruction or widening, and another 28,735 spans that require other structural work. This construction and repair work represents at least $288 billion in market opportunities, according to estimates submitted by state Departments of Transportation (DOTs). But the actual figure is probably much higher, because some states did not submit estimates for all the repair work they identified.

Based on the available data, there should be opportunities for bridge contractors of all sizes as work is awarded for the repairs highlighted in the NBI. Three fifths of the identified work is expected to cost under $1 million. Another 15 percent should range from $1 million to $5 million per project. States have also identified over 320 bridge projects valued at $100 million or more.

Using a weighted index based on the work that needs to be done on individual bridges, the reported cost of repairs as a share of all work, the length of the bridge and the deck area, ARTBA has identified the states that should be hot markets for bridge contractors, planning and design firms and material suppliers.

The advantage of using an index is that it provides a look at a number of different relative factors at one time. For example, a state may have a large number of bridges that need to be rehabilitated, but they are smaller structures, versus a state with fewer needed repairs, but larger projects. A state may not have as many steel bridges as other areas, but the cost of the identified repairs may be a large share of what they need to spend on all of their bridges, a factor that will be weighted in the index and highlight a potential market opportunity.

Although most states do not have enough resources to fund all of the identified projects, the top 10 states ARTBA has identified in each major category, with the highest index values, do have significant needs and may be worth a closer look for market opportunities.

States That Top Our List

State DOTs have the opportunity to identify what type of bridge repair is needed as part of the data they submit to the NBI, including a complete replacement. For this analysis major reconstruction work includes the widening of a bridge, deck rehabilitation or replacement, and overall rehabilitation because of structural deterioration. Other work includes any other identified structural work that is not major rehabilitation or replacement.

States that have significant needs for bridge replacement work include New Hampshire, Wisconsin, Louisiana, Utah, Nevada, Oklahoma, Idaho, South Dakota, Montana and Illinois.

For major rehabilitation and widening work, these states may provide market opportunities: Rhode Island, New York, Connecticut, Arizona, Oregon, Georgia, Vermont, New Mexico, Massachusetts and Kentucky.

Opportunity for other structural work was identified in Hawaii, Iowa, North Carolina, Nebraska, Texas, Washington D.C., Pennsylvania, California, Virginia and Wyoming.

Repairs or replacement are needed on over 77,000 steel bridges across the country, representing 43 percent of the nation’s steel bridge inventory. Based on the weighted index, some of the states that have opportunities for steel bridge work include Utah, Minnesota, Wyoming, New York, Colorado, Vermont, New Jersey, Massachusetts, Missouri and Washington, D.C.
March/April 2017 www.transportationbuilder.org

**Show Me the Money: States Focusing on Bridge Work**

Bridge projects have accounted for a national average 27 percent of state and local government surface transportation contract awards over the last three years. But there are 14 states where bridge projects account for more than 30 percent of contract awards over the same period, indicating a strong focus on such work. These states are:

- **New York**, 57 percent
- **Connecticut**, 52 percent
- **New Jersey**, 40 percent
- **Pennsylvania**, 40 percent
- **Massachusetts**, 39 percent
- **Ohio**, 38 percent
- **Rhode Island**, 36 percent
- **Vermont**, 36 percent
- **Colorado**, 36 percent
- **Missouri**, 33 percent
- **Maine**, 32 percent
- **Wisconsin**, 31 percent
- **Indiana** and **Kentucky**, 30 percent

Although U.S. bridge contract awards were down 23 percent in 2016 compared to the 2013-2015 national average, numerous states continued to focus on this critical work. Arizona, Delaware, South Carolina, Nebraska, Utah, Maryland, Iowa, Mississippi, Wyoming and Nevada significantly increased the real value of bridge contract awards in 2016 compared to the prior three-year state average.

**Looking Forward**

Regardless of how you look at the data, there are many opportunities for bridge contractors, designers and suppliers across the country. Historically, one of the best leading indicators of a ramp up in real bridge investment is the passage of a multi-year, federal-aid highway bill. This is because bridge projects are often multi-year, multi-million dollar investments that require federal, state and local resources.

With the 2015 Fixing America’s Surface Transportation (FAST) Act in the second year of its five-year authorization, bridge work opportunities should remain robust. Although it remains to be seen whether President Donald Trump can deliver on his campaign promise of investing $1 trillion in infrastructure, surely some portion of that work would be directed toward bridges.

In the long-term, the best market development would be to find a permanent revenue solution for the federal Highway Trust Fund and increase resources for state and local governments. This would allow states to have the resources to tackle some of the projects they have identified on so many bridges across the country.

**Deficient Bridges as % of State Inventory**

- **Rhode Island** 25%
- **Iowa** 21%
- **Pennsylvania** 20%
- **South Dakota** 20%
- **West Virginia** 17%

Dr. Alison Premo Black is chief economist at ARTBA.

**Read ARTBA’s 2017 Deficient Bridges Analysis**

The length of the nation’s structurally deficient bridges if placed end-to-end would stretch 1,276 miles, half the distance from New York to Los Angeles, according to ARTBA’s fourth annual examination of federal government data.

The analysis of the Federal Highway Administration’s 2016 National Bridge Inventory data found about 1,900 of the nation’s 55,710 structurally compromised bridges are on the Interstate Highway System. State transportation departments have identified 13,000 Interstate bridges that need replacement, widening or major reconstruction.

“America’s highway network is woefully underperforming. It is outdated, overused, underfunded and in desperate need of modernization,” ARTBA Chief Economist Dr. Alison Premo Black said. “State and local transportation departments haven’t been provided the resources to keep pace with the nation’s bridge needs.”

The full bridge report—with data by state and congressional district—is available at www.artlabridgereport.org.
Safe, Sound & Simple Under-Bridge Access

Offering Four Models for Purchase or Rental

HP35 35' Working Platform Trailer Model
HPT38 38' Working Platform Truck Model
HPT40 40' Working Platform Truck Model
HPT66 66' Working Platform Truck Model

inspectabridge™
803-366-8195  inspectabridge.com
©2017 Anderson Hydra Platforms. All rights reserved.
A SNAPSHOT OF U.S. TRANSPORTATION IMPROVEMENT PROJECTS

NEW NEW YORK BRIDGE

PROJECT NAME: New New York Bridge
LOCATION: Across the Hudson River 25 miles north of New York City
AGENCY/OWNER: New York State Thruway Authority
COMPLETION: Partial opening expected this year; fully open by 2018.
WEBSITE: www.newnybridge.com

THE TAPPAN ZEE BRIDGE replacement and I-287 corridor improvement project features two independent spans with eight lanes of traffic, wide shoulders for emergency vehicles, a pedestrian/bicycle path and multiple viewing platforms. It is replacing a more than 60-year-old structurally deficient bridge with new spans that have a 100-year service life before major maintenance is required. The design also allows for future mass transit options.

PROJECT FEATURES:
• Largest design-build highway in the United States.
• First-of-its-kind design for future commuter rail or potential light rail options on two independent bridge spans crossing the river.
• Massive stakeholder, community and contractor outreach.

ELIZABETH RIVER TUNNELS

PROJECT NAME: Elizabeth River Tunnels
LOCATION: Hampton Roads, Va.
AGENCY/OWNER: Virginia Department of Transportation
COMPLETION: Substantial completion, 2016
WEBSITE: www.driveert.com

THE ELIZABETH RIVER Tunnels project comprised the development, design, construction, finance and operation of a new two-lane tunnel under the Elizabeth River; maintenance and safety improvements to the existing Midtown and Downtown tunnels; MLK Expressway extension; and other interchange modifications. The 11 segments of the new tunnels were fabricated near Baltimore and floated more than 200 miles down the Chesapeake Bay to the tunnel location, lowered into place and attached with watertight seals. The new tunnels and other improvements are financed and built by Elizabeth River Crossings OpCo LLC, which will operate and maintain them for a 58-year concession period. VDOT maintains ownership and oversight of the project.

PROJECT FEATURES:
• First all-concrete, immersed tube tunnels.
• First public-private partnership (P3) deep-water tunnel project.

BROOKLYN BRIDGE

PROJECT NAME: Brooklyn Bridge Rehabilitation – Approach Ramps
LOCATION: Across the East River between New York City and Brooklyn.
AGENCY/OWNER: New York City Department of Transportation
COMPLETION: Spring 2017, other work ongoing

A SIMULATION TOOL HELPED develop a plan to keep traffic moving in the daytime while construction was done at night and on weekends. Seismic and retrofit elements were also performed on the Manhattan side ramp structures. As a part of this assessment, geotechnical engineering services and subsurface investigations included test borings, geophysical and laboratory testing. Seismic assessment identified structural elements that could be rehabilitated rather than replaced at a significant savings to NYCDOT.

PROJECT FEATURES:
• Used traffic simulation models to develop best option for movement of traffic, ultimately allowing traffic flow continue unrestricted during week days.
• Used seismic assessments on structural features that lead to significant cost savings for the client.

HULTON BRIDGE

PROJECT NAME: Hulton Bridge
LOCATION: Across the Allegheny River between Oakmont Borough and Harmar Township, near Pittsburgh, Pa.
AGENCY/OWNER: Pennsylvania Department of Transportation
COMPLETION: May 2016
WEBSITE: www.penndot.gov

THE $65 MILLION HULTON bridge was designed to meet the Pittsburgh region’s future travel needs while retaining the unique aesthetics of the 1908 original structure. The new bridge – a 1,633-foot multi-span, steel girder structure – improves safety, traffic flow, and functionality. During construction, temporary bridges and floating barge causeways provided safe river access during construction. Bridge piers with limited footprint on the riverbed improve navigation and reduce environmental impact.

PROJECT FEATURES:
• Design enables future redecking without closure of the bridge.
• Used a strand jacking to lift a 280-foot, 1,200-ton section of the superstructure and limit river closures to just 48 hours, meeting U.S. Coast Guard requirements.
• Accelerated design and construction schedules kept road closures to a minimum and ensured the bridge opened in advance of the 2016 U.S. Golf Open at Oakmont C.C.
SECOND AVENUE SUBWAY

PROJECT NAME: Second Avenue Subway
LOCATION: New York City, N.Y.
AGENCY/OWNER: Metropolitan Transportation Authority
COMPLETION: Jan. 1, 2017 (first phase)
WEBSITE: web.mta.info/capital/sax_alt.html

TWO NEW SUBWAY TUNNELS were dug 33 city blocks long, including space to accommodate the new stations and miles of water, sewer, electrical, and utility lines, and traffic signal wiring connections. The new 86th Street Station alone called for the excavation of 450,000 tons of rock underneath a densely populated neighborhood. The tunnel boring process had to accommodate the removal of hard rock and messier material filled with water and soil. The team used a freezing process to make the former handle more like the later.

PROJECT FEATURES:
• NYC’s biggest subway expansion in 50 years.
• Nearly 2-mile segment first phase adds four new stations.
• When complete, the 8.5-mile line will provide service on Manhattan’s East Side, from 125th Street in Harlem to Hanover Square in Lower Manhattan.
• Easy transfers to other subway lines and commuter rail lines.

Landside Access Modernization Program

PROJECT NAME: Landside Access Modernization Program (LAMP)
LOCATION: Los Angeles International Airport (LAX)
AGENCY/OWNER: Los Angeles World Airports
COMPLETION: Anticipated 2023
WEBSITE: www.connectinglax.com

THE $5 BILLION LAMP PROJECT began in 2016 with environmental reviews and other public hearings. Construction could start by the end of 2017. The centerpiece of the project is the 2.25-mile, above-ground Automated People Mover system with six stations. LAX passengers will connect with airline terminals, centralized rental car facility, pickup and drop-off locations, parking, and the regional transit system.

PROJECT FEATURES:
• Project will increase transportation options to, from and within LAX.
• Includes roadway improvements with dedicated areas for passenger pick-up/drop-off, parking facilities with direct access to central terminal, car rentals in centralized location near the 405 freeway, and connections to the regional rail and bus transit system.

IRONTON-RUSSELL CABLE-STAYED BRIDGE

PROJECT NAME: Ironton-Russell Cable-Stayed Bridge
LOCATION: Across the Ohio River between Ironton, Ohio & Russell, Ky.
AGENCY/OWNER: Ohio Department of Transportation
COMPLETION: 2016
WEBSITE: www.dot.state.oh.us

THE DESIGN TEAM introduced modifications to reduce overall costs. These included casting the back spans in place using specially designed falsework and the first known use in the USA of precast stay anchor blocks. Constructing the back spans on falsework simplified construction and minimized the amount and size of equipment required for the cable-stayed portion of the project.

PROJECT FEATURES:
• Falsework was designed as a modular system, allowing it to be used for both the Kentucky and Ohio approaches and reducing the number travelers from two to one.
• First use of a precast stay anchor block system in the United States, which simplified and accelerated the construction schedule.

I-4/Selmon Expressway Connector

PROJECT NAME: I-4/Selmon Expressway Connector
LOCATION: Tampa, Fla.
AGENCY/OWNER: Florida Turnpike Authority
COMPLETION: 2014
WEBSITE: www.mytbi.com

A PAIR OF MOTORIZED erectors progressively placed segments in a balanced cantilever from the top of the bridge. This accelerated bridge construction (ABC) methodology allowed the team to efficiently erect segments over slopes, mechanically stabilizing earth walls, railroads, and roadways, which reduced impacts to the traveling public. The Connector is an all-electronic, no-cash toll road, so vehicles must use the Florida SunPass or be billed at a higher rate with Toll-By-Plate.

PROJECT FEATURES:
• Provides an elevated toll connection between Interstate 4 and the Lee Roy Selmon Expressway.
• Dedicated truck lanes for last-mile access to and from the Port of Tampa.
• Removed heavy truck traffic from historic Ybor City neighborhood.
That’s how many people are killed or injured in and around U.S. transportation construction projects each year, according to the Federal Highway Administration. Industry leaders have decided status quo safety performance is not enough. They’ve launched the Safety Certification for Transportation Project Professionals™ (SCTPP) program to address this serious public health issue. Its goal: To significantly boost the hazard awareness and risk management skills of all transportation project professionals who are in positions of influence—from project inception through completion—to cause a decline in safety incidents.

The SCTPP is designed to meet the rigorous protocols for ANSI ISO/IEC 17024 accreditation.

The next window to take the exam is Oct. 16–Nov. 17.

50,000
That’s how many people are killed or injured in and around U.S. transportation construction projects each year, according to the Federal Highway Administration. Industry leaders have decided status quo safety performance is not enough. They’ve launched the Safety Certification for Transportation Project Professionals™ (SCTPP) program to address this serious public health issue.

Its goal: To significantly boost the hazard awareness and risk management skills of all transportation project professionals who are in positions of influence—from project inception through completion—to cause a decline in safety incidents.

The SCTPP is designed to meet the rigorous protocols for ANSI ISO/IEC 17024 accreditation.

The next window to take the exam is Oct. 16–Nov. 17.

High Steel Structures Fabricates Virginia Bridge with ASTM A1010
By Lisa Masters

At first glance, the new launched-girder bridge in Waynesboro, Virginia, seems to be a fairly common design, but its superstructure is quite out of the ordinary. The material used to fabricate the girders is high-strength, corrosion-resistant American Society for Testing and Materials (ASTM) A1010 steel plate. The Virginia Department of Transportation (VDOT) decided to use A1010 steel to improve the durability of this replacement of a structurally deficient bridge from 1934.

The new bridge, scheduled for completion later this year, carries Route 340 (Main Street) traffic over the South River in Waynesboro’s downtown business district. Contractor Fairfield-Echols, LLC of Fishersville, Va., is managing the more than $7 million contract to build the bridge and adjoining roadway, utility, lighting and landscaping improvements.

Subcontractor High Steel Structures fabricated 181 tons of steel for the project. This material had to be treated differently from traditional steel plates. The steel is cut with plasma and can’t be cut with oxyacetylene. While it can be welded, the A1010 plate requires special stainless steel consumables.

A1010 steel is still very new to the industry, previously used in only five other projects in California, Oregon and Iowa. The Main Street Bridge is the first to feature A1010 with cross frames, fasteners and bearings as well as the girders. Aesthetically, the bridge will look much like weathered steel after a period of time.

The use of A1010 steel by VDOT and other state transportation departments shows the growing priority being placed on structural durability. While A1010 is more expensive than traditional bridge steels, the girders have the potential to lower long-term maintenance costs and reduce traffic disruptions. Its improved corrosive-resistive properties may provide increased service life, making it well suited for locations where weather conditions and other elements are a major threat.

Lisa Masters is marketing communications and research specialist at High Steel Structures LLC.
National Workzone Safety Information Clearinghouse

The World’s Largest Online Information Resource

USE IT...SAVE LIVES!

- Crash Data
- Research Library
- Learning Opportunities
- Flagger Information
- Events & Conferences
- Hot Topics

Information provided by the National Workzone Safety Information Clearinghouse, award #693JJ3175009, does not necessarily reflect the views of the U.S. Highway Administration (FHWA) or the American Road & Transportation Builders Association-Transportation Development Foundation. References to specific products and services do not imply endorsement by the Clearinghouse or FHWA.

We are working hard every day to construct and rehabilitate our nation’s vital infrastructure. We’re not just building roads and bridges, we’re building what matters to improve lives now and for generations to come.

Kosciuszko Bridge Project - Phase I, Brooklyn and Queens, NY

usa.skanska.com

WZCH
National Workzone Safety Information Clearinghouse

Library of Resources to Improve Roadway Work Zone Safety for All Roadway Users

Smarter Work Zones

- What’s new
- Top 10
- FAQ’s
- News
- Events & Conferences
- Hot Topics
- Online Information
- Flagger Information
- Extra Resources

www.workzonesafety.org
Q&A with transportation investment advocate Juva Barber

TB: You’ve attended all three previous National Workshops for State & Local Transportation Advocates. What are the benefits of attending this event?

JB: There is no other event like this in the country that provides an opportunity for advocates to gather and discuss issues. The National Workshop provides forums to share information on the issues we face and the solutions we develop.

TB: Outside of the annual national workshop, how does the Transportation Investment Advocacy Center (TIAC) help Kentuckians for Better Transportation (KBT)?

JB: KBT depends on the information TIAC compiles regarding transportation funding initiatives in other states. When discussing transportation funding, I am often asked what our neighboring states are doing. TIAC keeps me informed so I can answer quickly and correctly.

TB: What are a few of Kentucky’s most critical transportation construction projects, either under construction, or that need to be built?

JB: At KBT, we believe there is value in all infrastructure projects – regardless of the size or the mode of transportation. However, the need for some projects does receive national recognition. In January, reports circulated that indicated President Trump’s team identified the Brent Spence Bridge project as a priority project. The bridge, which was built more than 50 years ago, connects Kentucky to Ohio. It was designed to carry 80,000 vehicles per day. Now more than 160,000 vehicles cross the bridge per day and that is only expected to increase due to growth in the area.

TB: What’s your most impressive experience with U.S. transportation infrastructure?

JB: Kentucky recently completed one of the largest infrastructure projects in the country – the Louisville Southern Indiana River Bridges Project. The two bridges are beautiful and they enhance our region’s skyline. More importantly, they have contributed to our economy by providing better, safer access to the people and the companies who depend on our transportation network every day. The bridges have truly improved our quality of life in Louisville.

TB: You joined KBT in 2013 after working with associations that represent the petroleum/convenience store, and home building, markets. What are some of the lessons you’ve learned about working in transportation?

JB: Transportation is one of our nation’s most necessary, and most used, assets. Unfortunately, it also is one of our most underappreciated assets. People tend to appreciate and understand the investment they make in their homes and they are willing to pay to maintain and improve their investment. When it comes to infrastructure like roads and bridges, it can be difficult for people to realize that same need for continued investment and improvement.

TB: You’ll be speaking at the workshop in July about Kentucky’s variable-rate gas tax. How can this help advocates in other states?

JB: Kentucky has had a variable-rate gas tax for more than 30 years and we have experienced both long-term growth and very fast declines in revenues due to the variability of the rate. Sharing our state’s experience – both the positives and the negatives – can help other states make decisions on how best to meet their infrastructure funding needs – whether it is through the mechanism we use or some other formula.

TB: What’s your most impressive experience with U.S. transportation infrastructure?

JB: While in college, I worked in the oil industry and was in Kentucky when the bridge linking the two states was completed. It was an impressive sight and it demonstrated how transportation infrastructure is crucial to the economy. It was a great experience to see how important transportation was to the state and to the country.

TB: What’s the view from Kentucky about how the federal government—President Trump and Congress—is handling transportation needs?

JB: Infrastructure is at the heart of everything – from economic development to education to our nation’s safety and security. We must have adequate funding to maintain the infrastructure we have and to build the additional infrastructure we need. In Kentucky, we look forward to learning more about President Trump’s infrastructure plan and how that plan will be funded.
Scorecard of Regulatory Changes Under Trump

By Nick Goldstein
ngoldstein@artba.org

There’s been a lot of activity on the regulatory front since Donald Trump took office in January. Here’s an update on more than a dozen rules, at left, and what action is being taken by ARTBA, the administration, federal agencies and the courts, at right.

Geographic-Based Hiring Preferences: U.S. Department of Transportation (U.S. DOT) proposal to end federally-mandated local hiring preferences, with a pilot project for such preferences by state and local agencies.

Hours of Service: The rule limits on-duty time for long-haul drivers to address fatigue. Transportation construction drivers typically don’t spend as many hours per day on the road.

Project Labor Agreements (PLAs): February 2008 Obama administration executive order required PLAs on certain direct federally-funded construction projects, and encouraged their use on federal-aid projects.

Corporate Average Fuel Economy (CAFE) Standards: 1970s-era regulation to improve the average fuel economy of cars and light trucks produced for sale in the U.S.

Silica Exposure: Occupational Safety and Health Administration (OSHA) regulations to significantly tighten existing federal standard for allowable worker exposure to crystalline silica dust.

Recordkeeping: A regulation known as the “Volks Rule” would extend the period that OSHA can cite companies for recordkeeping violations from six months to five years.

“Fair Play and Safe Workplaces”: Direct federal contractors bidding on solicitations of $50 million or more would be required to disclose their violations of 14 different federal workplace health and safety laws.

Endangered Species Act (ESA): Includes the determination of “critical habitat” designation, which can remove hundreds of square miles from the possibility of development.

EEO-1 Form Revisions: Equal Employment Opportunity Commission (EEOC) change to existing information-gathering rules for businesses with 100 or more workers now requires salary data.

Social Cost of Carbon (SCC): An annual estimate of the monetized damages associated with an incremental increase in carbon developed by 13 federal agencies.

Waters of the U.S.: The EPA and the U.S. Army Corps of Engineers (Corps) would expand federal jurisdiction under the Clean Water Act (CWA), making roadside ditches subject to federal jurisdiction.

Nationwide Permits (NWP): Save regulated industries save time by allowing them to bypass individual permits on projects that “cause only minimal adverse environmental effects.”

National Ambient Air Quality Standards (NAAQS): This EPA check of six pollutants, done every five years, can jeopardize federal highway funds in counties that do not meet the standards.

The Florida Transportation Builders’ Association (FTBA) is accepting resumes for the position of President of the association. FTBA is a statewide industry association representing contractors, equipment dealers, material suppliers, engineers and others involved in the road building industry in Florida. FTBA is headquartered in Tallahassee, Florida.

The position will be filled effective Jan. 1, 2018, followed by a one-year period working directly under the current President. The current President will be retiring on Dec. 31, 2018, and the position of President will be assumed at that time.

A minimum of 15 years with proven management experience in the construction industry working for either a construction firm, state Department of Transportation or an engineering firm is required. Experience working with a state Department of Transportation as a contractor, engineer, inspector or employee is also required. Experience in political and legislative affairs is preferred.

ASSOCIATION PRESIDENT

Please send resumes no later than May 31, 2017, to: FTBA, Attn.: President, 1007 E. DeSoto Park Dr., Tallahassee, FL 32301
SoftStop®

Guardrail End Terminal

The SoftStop® is the first and only tangent energy absorbing guardrail end terminal on the market today that meets all mandatory crash test requirements set forth in AASHTO’s Manual For Assessing Safety Hardware (“MASH”). The SoftStop is eligible for Federal-aid reimbursement for use on the National Highway System.

New Report Captures Equipment Manufacturers’ Contributions to Economy

The equipment manufacturing industry supported almost 1.3 million jobs in the United States in 2016, and added $159 billion to the nation’s Gross Domestic Product (GDP) at the same time, according to a new report from the Association of Equipment Manufacturers (AEM).

Infrastructure Investment


It arrives at the conclusion of the triennial CONEXPO-CON/AGG exhibition in Las Vegas, and as national elected leaders place a renewed emphasis on manufacturing jobs and infrastructure investment. This includes President Trump’s push for a $1 trillion investment in U.S. infrastructure, financed through both public and private capital.

The crumbling state of our infrastructure is well documented: for example, the TRIP national transportation research group notes that 20 percent of America’s major roads are in poor condition and 23 percent of America’s bridges are structurally deficient or functionally obsolete.

Employment & Output

Equipment manufacturers contributed over $25 billion in local, state and federal taxes and generated about $87 billion in labor income (amounting to about $76,000 in wages per equipment manufacturing industry job), in 2016, according to the report.

Texas leads the country in equipment manufacturing employment and output, followed by Illinois, Wisconsin, Ohio and Iowa.

“Out industry is a core part of America’s manufacturing economy, and we are eager to continue to grow, and, hopefully with a significant investment in our infrastructure, help put millions of Americans to work,” said AEM President Dennis Slater.

Looking Ahead

The report adds additional detail about some of the key variables that support each industry segment, and forecasts growth for the industry into 2018 and beyond.

The full report can be found at www.aem.org/Economic-Research-Report/.

The Association of Equipment Manufacturers is the North American-based international trade group providing innovative business development resources to advance the off-road equipment manufacturing industry in the global marketplace. See www.aem.org.
State Transportation Funding Update

In the first three months of 2017, ARTBA’s Transportation Investment Advocacy Center™ tracked 104 transportation funding bills in 32 state legislatures, about the same pace of activity as in 2016 and 2015. More bills are expected throughout this year. Increasing motor fuel taxes remains the most frequent revenue-generating proposal—34 bills in 18 states—followed by license, weight and other fee increases, tolling, and sales taxes. See the full report at transportationinvestment.org.

Types of Funding Increase Introductions in 2017

<table>
<thead>
<tr>
<th>Type of Funding Increase</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Fuel Tax</td>
<td>34</td>
</tr>
<tr>
<td>Variable-Rate Tax</td>
<td>10</td>
</tr>
<tr>
<td>Electric Vehicle Fee</td>
<td>11</td>
</tr>
<tr>
<td>Non-Fuel Tax Recurring Funding</td>
<td>26</td>
</tr>
<tr>
<td>One-time Funding</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>36</td>
</tr>
</tbody>
</table>

Note: Individual bills may contain multiple revenue source proposals.

Compiled by the Transportation Investment Advocacy Center™
GOMACO Corporation pioneered the development of the first cylinder finisher over 50 years ago when the company developed and manufactured a bridge deck finisher to meet the growing needs for bridge markets. Today, GOMACO cylinder finishers are designed for versatility with the C-450 and C-750. The C-450 frame widths range from 12 feet to 104 feet, with transitional framework attached. The C-750 frame widths range from 16 feet to 160 feet. They are easy to operate and save time and labor costs on all of your concrete finishing projects. Pin-connected sections provide fast setup time and the versatility to fit exact job requirements. GOMACO’s patented three-point finishing system provides the smoothest deck possible with an auger to level the concrete, a cylinder consolidates and finishes the concrete, and a float pan seals and textures the surface. GOMACO finishers are available with several different options to customize them to your exact bridge deck specifications. Give us a call for the latest in concrete paving technology. Our worldwide distributor network and our corporate team always stand ready to serve and assist you.