UNH Engineers Bring Memorial Bridge to Life with Data Sensors

Engineers at the University of New Hampshire designed a living laboratory on the iconic Memorial Bridge, which could change how infrastructure is viewed. Memorial Bridge was outfitted with data sensors that transformed it into a self-diagnosing, self-reporting “smart” bridge that captures a range of information from the health of the span to the environment around it.

“We call it a ‘living’ bridge because it can talk to us and provide valuable information about its health - the stress it deals with, the ease at which it moves, what’s happening around it and even under it in the Piscataqua River,” said Erin Bell, associate professor of civil engineering and principal investigator of the Living Bridge Project. “This bridge is not just for getting us across the water, it can teach us so much more about the world around us.”

Read the full story.

Sponsor Spotlight
In the late 1950s, as the US came to rely more heavily on machines and automation, technically skilled workers who could support the work of engineers were in high demand. In 1961, NSPE rose to the challenge by forming an organization to certify technicians and technologists.

But even though technicians have been an integral part of the engineering team and NSPE since then, that organization—the National Institute for Certification in Engineering Technologies—is not always understood by PEs. A well-attended, NSPE-sponsored webinar on May 29 provided the full picture.

During the webinar, "Quality and Safety Through a Qualified Engineering Team," NICET Communications Director Chip Hollis detailed the institute’s operations and the technician’s role on the team. NICET was founded to recognize the qualifications of technicians. Its focus, Hollis explained, helps ensure a qualified engineering workforce, certifying both engineering technicians and technologists in areas such as construction materials testing, transportation construction inspection, electrical power, fire protection, and security systems.

Don't Miss This Upcoming Webinar
Stay current with essential professional development opportunities through NSPE webinars. Members receive a special rate on the upcoming live webinar:

On June 26 at 2 p.m., the webinar The Saint Joseph Water Crisis – Lessons Learned in the Age of Deteriorating Water Infrastructure will focus on a water crisis in Saint Joseph, Louisiana, which lends many lessons related to the difficulties faced by small and large water systems in rural environments. In this session, David A. Martin, P.E., will present an overview of the state of the town’s water system prior to and after construction, as well as an overview of the new treatment process and applicability to other aquifer systems. Additionally, participants will be presented with the lessons learned during the crisis, including regulatory involvement, use of multiple funding sources, early owner procurement of long lead time equipment, and alternate project delivery.

Don’t Miss...

- **Exemptions to Engineering Licensure Laws.** NSPE has updated this report, with information current as of May 2019. It is free for members.

- **Take Action on Licensure Exemption Bills.** It’s imperative that lawmakers hear from their professional engineering constituents who support bills in the US House and Senate targeting licensure exemptions in public utility pipeline work.

- **PECON at a Glance.** Take a look at the lineup of activities and educational sessions taking place at the 2019 Professional Engineers Conference in Kansas City.