

Advancing the Profession with NSPE-MN

Welcome to the launch of *PE Matters*! This quarterly newsletter is designed to keep members of NSPE-MN up to date on NSPE and Minnesota engineering related news and events.

PE Matters will also give members an opportunity to share information on innovative engineering projects and illustrate how they are advancing the profession and protecting the public health, safety, and welfare.

Minnesotan Primed to Become Society President

Minnesota civil engineer David Martini, P.E., F.NSPE, will be installed as NSPE president on July 20 at the 2019 Professional Engineers Conference in Kansas City.

The principal engineer with the firm Bolton & Menk Inc., in Chaska, Minnesota, manages municipal engineering projects, including water supply, wastewater, drainage, and streets. He also has worked on the design and construction administration of residential and industrial subdivisions, park improvements, and utility upgrades. In addition to 19 years at Bolton & Menk, Martini's experience includes almost six years as a project engineer at the Minnesota Department of Transportation.

Martini joined NSPE and the Minnesota Society of Professional Engineers in 1994. He served in many chapter- and state-level leadership positions, including as 2011–12 MSPE president. His efforts and accomplishments also earned him MSPE's Extra Mile Award and Young Engineer of the Year designation.

At the national level, Martini has chaired the Program Prioritization Task Force and served on the Committee on Policy and Advocacy as well as the DiscoverE Board of Directors.

Martini grew up in St. Cloud, Minnesota, and graduated in 1994 from North Dakota State University with a BS in civil engineering. In 2002, he earned an MS in infrastructure systems engineering from the University of Minnesota.

Martini and his wife Julie are the parents of two sons, Max and Jed, who are both in college.

About 2019–20 President David Martini



Born and raised in Minnesota, Martini is a diehard Minnesota sports fan. His favorites: the Vikings, the Twins, and the Gophers. Here are a few other facts about him.

Why I became an engineer: For as long as I can remember, I have loved to solve problems. Becoming an engineer gave me the opportunity to solve problems and help people in the process.

The engineering achievement that amazes me: Space travel fascinates me. The fact that engineers calculate the movements and positions of objects in space down to the second is amazing to me.

Favorite hobby: Golf. I love it. Then I hate it. Then I love it again.

Managing Client Expectations as the Standard of Care Evolves

AEC firms often face the challenge of providing quality services while resisting unrealistic client demands to go above and beyond the standard of care, especially as it evolves with technology advances.



In the May/June issue of *PE* magazine, NSPE-MN member Jeffrey Coleman, P.E., Esq., offers his expertise on how managing client expectations and implementing sound quality control processes go hand in hand with maintaining the right standard of care level.

Engineers must maintain sound engineering practices and design with safety in mind to decrease liability risks, but there is no standard-of-care crystal ball. Every time a new technology or design practice comes on the scene, Coleman is commonly peppered with the question: What is the standard of care *now*? “I tell people to ask me in 10 to 15 years because that’s how long it takes for cases to get through the court systems to offer solid guidance,” says the principal partner of the Coleman Law Firm in Minneapolis.

Most importantly, Coleman advises his AEC clients that when negotiating a contract for professional services it's just as important to define what's not in the scope of work as it is to define what is in the scope of work.

[Read the full article on client demands and the standard of care.](#)

At Your Fingertips: Minnesota PE Laws and Rules

As a service to members, state societies, the engineering community, and the public, NSPE offers several reports on state professional engineer laws and rules. They cover topics such as continuing education requirements, digital signing and sealing of engineering documents, PE exam timing, and more.

Now, NSPE members can easily view report information by state. Access all the information for Minnesota on one convenient page or easily see information related to a particular topic for the state. Want to know about exemptions to engineering licensure laws? The language is a simple click away.

Go to the [state reports page](#) to search via the interactive map or search portal.

What's the Status of Bridges in Your State?

A recent American Road & Transportation Builders Association report provides a snapshot of the status of bridges in the US. The association compiled [state profiles and rankings](#) from the Federal Highway Administration's 2018 National Bridge Inventory Data (released in March 2019).

The profile highlights the following about bridges in Minnesota

- Of the 13,358 bridges in the state, 5% (668) are classified as structurally deficient (one of the key elements is in poor or worse conditions). This is down from the 802 bridges classified as structurally deficient in 2014.
 - Nineteen of the structurally deficient bridges are on the interstate highway system.
 - More than 1,340 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
 - The state has identified needed repairs on 2,757 bridges at an estimated cost of \$521.3 million. This is compared to 3,311 bridges that needed repair work in 2014.
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Complete the Engineering Team With NICET Certification

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.

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