

TO: NSPE Board of Directors

cc: NSPE Committee, Task Force, Council and Interest Group Chairs
State Society Presidents and Presidents-Elect
State Society Executives Council
NSPE Past Presidents

FROM: Mark J. Golden, FASAE, CAE 
Executive Director & CEO

DATE: January 6, 2020

RE: Board Update: December 15–31, 2019

Champion

Two new videos launched on the importance of professional licensure. The latest elements in the public awareness campaign from the [Alliance for Responsible Professional Licensing](#) go public this week. (NSPE is a founding partner and steering committee member of the coalition.) Supported by social media campaigns targeted to communities where antilicensure initiatives are being pushed, these videos tell the other side of the story.

We draw your attention in particular to the testimonial interview arranged by NSPE with [Kerry Cooley Bruggemann, P.E.](#) Kerry was a great interview and helped ARPL capture some terrific b-roll at the Minneapolis airport that can be used in later communications as well.

There is also a new video on [the role of state boards](#). The video uses a mix of animation, voiceover, and kinetic text to tell this complex story in a succinct and engaging way.

Both these videos offer tangible examples of the benefits that NSPE was looking for when it spearheaded formation of this coalition. This and the other communications collateral ARPL has already developed make the rather remote and esoteric concept of licensure relatable to a layperson and emphasize many of the key findings from coalition-sponsored public awareness surveys (e.g.; the need for better public understanding of how licensure assures qualified practitioners, creates obligations for continued professional development beyond entry into a profession, how boards include *both* expert and public members, and how licensing boards operate to protect the public).

NSPE encourages states to use the information in this report in newsletters or other updates to their membership to inform members on the activities of NSPE. As a suggestion, it may be most useful to take the bullets of most interest from the transmittal email. The full report (and past reports) can always be found [online](#).

Taking action on gas pipeline safety and the industrial exemption. As we have been reporting, the National Transportation Safety Board recently sent letters to the governors in [31 states](#) urging them to end exemptions for gas pipeline operators and asking for an update within 90 days.

The engineering profession in those states are following up on this request.

- **Virginia:** The Virginia Society of Professional Engineers has offered to assist the Virginia State Corporation Commission Division of Utility and Railroad Safety in developing legislation to eliminate the current exemption for licensed engineers to prepare gas pipeline design and construction plan drawings. The Virginia PE board has drafted language that can address this exemption in the state PE statute.
- **Illinois:** The Illinois Society of Professional Engineers is engaging with the Department of Financial and Professional Regulation to understand what actions will be taken to address the NTSB letter and recommendations.
- **Maine:** The state Board of Licensure for Professional Engineers has reviewed the NTSB letter sent to Governor Jane Mills. A three-person subcommittee was formed to review the issue in detail and draft a response for the governor's office.
- **Minnesota:** The NSTB's inclusion of Minnesota in this list was in error, as the state does not exempt gas utilities from PE requirements. The Minnesota Society of Professional Engineers is taking steps to correct the record.

We need to know what every state is doing to close licensure exemptions. Regional directors in particular are urged to help us collect information on how each state on the NSTB list is taking action. Updates can be provided to [NSPE's manager of government relations](#).

NSPE defends the PE license in Iowa. To set the record straight, NSPE President David Martini responded to a recent editorial in the state's *Gazette* newspaper that urged the governor and legislature to "go big" on licensure reform. Martini argued that the "middle ground consensus in the licensing debate should start with an acknowledgment that professional licensing is—and must remain—rigorous" in complex fields like engineering, where the health, safety, and welfare are at risk. He added that "licensing done right works." The [letter](#) was carried in both print and online editions of the *Gazette*.

Guide

The American Bar Association's Forum on Construction Law made extensive citations to NSPE's Code of Ethics and Board of Ethical Review case studies in a lengthy article on "The Potentially Catastrophic Design Error and the Ethical Response." The focus of the entire fall 2019 issue of *Construction Lawyer* (Volume 39, Number 4) was "Flirting with Disaster" and the ethics of response when the unthinkable occurs.

Advance

Don't miss the winter and spring lineup of NSPE webinars: Upcoming continuing education course topics and schedule include:

- February 5: [Licensing for Profitability, Agility and Growth for Small and Mid-Sized Engineering Firms](#)
- March 25: [Emotional Intelligence at Work](#)

Spring Ethics Series

- March 18: [Engineering Ethics – Disclosure, Payment, Expert Testimony and Conflicts of Interest](#)
- April 15: [Engineering Ethics – Conflicts of Interest, Licensure, Confidentiality, and Public Criticism](#)
- May 13: [Engineering Ethics – Objectivity and Truthfulness, Public Health and Safety, Signing and Sealing of Engineering Drawings and Misrepresentation](#)

[Special pricing](#) for the ethic series, when purchased in a bundle, expires on March 17.

All webinars are conducted from 2:00 p.m. to 3:00 p.m. Eastern.

Planning for the 2020 Professional Engineer Conference is underway. In response to the open call for session proposals, the conference planning committee has received 55 submissions to date. (We have 28 session slots, including keynotes, to fill.)

The conference will be held August 12–16, in Philadelphia.

Where do engineering graduates go? According to the National Science Foundation's [National Survey of College Graduates](#), approximately 55% of individuals in the workforce with a bachelor's in engineering as their terminal degree, 56% of those with a master's degree, and 50% of doctoral graduates currently work as engineers. This means 44–50% of engineering graduates work in other areas of the workforce. The report indicates that many of those individuals are working within the computer, mathematical sciences, science- and engineering-related fields outside of science and engineering. While this represents a large loss of talent for engineering, the study notes that the wide distribution of trained engineers across various other fields and areas within the US workforce highlights the transferability of skills gained by engineering graduates at all degree levels.

How to create future engineers in four steps: Given that the competition for talent is intensifying and so many STEM specialists are choosing to work in other sectors, such as finance and tech, the World Economic Forum has outlined [four steps the engineering industry](#) can take to address these trends and ensure engineering talent for the future.

1. **Inspire the next generation.** By the middle of this decade, individuals born between 1980 and 1996 will make up three-quarters of the global workforce. They're looking for a career with a strong sense of duty and purpose. Engineering,

which creates concrete opportunities to literally build a better world, offers them that.

2. **Increase diversity within the profession.** The next-generation workforce sees diversity as a core part of any forward-thinking organization. Yet, despite initiatives to increase diversity and inclusion within engineering, the sector is still experiencing a significant diversity gap.
3. **Replace strictly linear career models** with more flexible work conditions, career paths, and project management approaches.
4. **Recognize and reward the value of human skills**, such as critical analysis, strategic thinking, problem-solving, communication, and empathy, not just technical competence.

Unite

Time is running out to nominate your fellow PEs for national honors. The deadline for applications is January 31.

- [NSPE Award](#)—the highest award given by the Society. It is presented to an engineer who has made outstanding contributions to the engineering profession, the public welfare, and humankind;
- [Distinguished Service Award](#)—recognizes a licensed member for exceptional contributions to the profession, to one’s community, and specifically to NSPE;
- [Young Engineer of the Year Award](#)—recognizes a young NSPE member who has made outstanding contributions to the profession and the community.

[Learn more about NSPE awards.](#)

At least five MATHCOUNTS alumni have earned the prestigious [Presidential Early Career Award for Scientists and Engineers \(PECASE\)](#), recognizing individuals who have made significant contributions to the advancement of science, technology, and education early in their career. They are Hugh Churchill (’97), Stephen Jordan (’94 & ’95), Percy Liang (’95 & ’96), Po-Shen Loh (’95 & ’96), and David Zhang (’95 & ’96).

The newly updated and revised [NSPE Strategic Plan](#) represents *both* continuity *and* change: continuity with the society’s unchanging goal of protecting public health, safety and welfare; and a recognition that we needed change in order to achieve more impact, through strategies backed by resources that will deliver real-world results.

It starts from a simple premise, something that has been NSPE’s reason for being since it was founded 85 years ago. It is a premise that should resonate with any man or woman on

the street, regardless of their familiarity (or lack thereof) with NSPE, engineering or licensure, namely that ***we all deserve to live in a world where we can be confident that the engineering decisions affecting our lives are made by qualified and ethically accountable professionals.***

NSPE's unique role in bringing this vision to reality follows in a mission statement of just nine words: ***to foster licensed professional engineers in service to society.***

That will be achieved by engaging in activities governed by the organization's values: ***ethics and accountability; qualifications; professional advancement; and unity.***

That is the all-important ***why*** and ***how*** of NSPE. We can never afford to take our eyes off these statements. They need to guide and inform every decision we make as an organization.

And remember, you always have access to numerous NSPE leadership resources in the [Leadership Toolbox](#). This includes [talking point](#) scripts and presentations for use by NSPE officers, board members, and other leaders during state visits, chapter meetings, or other venues to promote NSPE and its activities, updated on an at least quarterly basis.

The [State and National Leaders](#) community page is not only a direct means of engaging, sharing ideas, and asking for advice from your peers in leadership across the country, it is your link to data, reports, and analysis on membership, programs and activities to better inform and support your leadership duties at the national, state and chapter level.

Current board members can access an online library of board meeting materials (past, current and future) through the online board book site, ([BoardBookIt](#)).