Champion | Guide | Advance | Unite

TO: NSPE Board of Directors cc: NSPE House of Delegates

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

DATE: 3 February 2017

RE: Board Update: January 15-31, 2017

I noted in my last update that a brief 2016 Year in Review was available on the website. Its content has been repackaged in a 2½ minute animated PowToon, which can be accessed through our website or directly on the NSPE YouTube channel. Social media promotion of the video is underway. Your retweets, likes and forwards would be greatly appreciated.

Championing the PE License

NSPE and the Alabama Society of Professional Engineers have joined forces to oppose a proposed regulatory change that would eliminate current qualifications-based selection requirements in the state. In a joint letter to the Alabama Board of Licensure for Professional Engineers and Land Surveyors, NSPE President Kodi Jean Verhalen, P.E., Esq., F.NSPE and ASPE President Paul McCain, P.E., urged the board to retain its current QBS requirements: "The administrative regulations proposed for repeal are important components of QBS.... Unfortunately, the recommended amendment is inconsistent with QBS and creates a procurement system in which price alone is given priority over the competence and qualifications of the provider in making procurement requirements. NSPE believes QBS is the *best* method for procuring architectural and engineering services." QBS protects the public welfare, benefits the taxpayer, levels the playing field for small firms and promotes technical innovation. NSPE and ASPE will continue to actively oppose this effort and provide updates as they become available.

NSPE and the Minnesota Society of Professional Engineers have teamed up to oppose an effort to create separate requirements for the practice of structural engineering. In a joint letter to the Minnesota Structural Engineers Association's Structural Engineering Licensure Task Force, NSPE and MnSPE expressed concerns about legislation proposed by the task force that would restrict the use of the title "professional structural engineer" to those who have passed the NCEES 16-hour structural engineering exam. NSPE President Kodi Jean Verhalen, P.E., Esq., F.NSPE, and MnSPE President Brian Malm, P.E., stated that such a

requirement could have unintended consequences that negatively impact the practice of engineering in Minnesota and interfere with the ability of qualified professional engineers to continue their practice in the state. Creating a separate designation, wrote Verhalen and Malm, "implies that licensure as a professional engineer is not adequate and that those without designation as a 'Professional Structural Engineer' are unqualified to practice, neither of which is true."

NSPE is urging the Georgia licensing board to carefully consider a proposed amendment to a rule on structural engineering that could negatively impact the practice of engineering in the state. The amendment would require any applicant for engineering licensure who designates the branch of structural engineering to take the 16-hour NCEES Structural Engineering Exam. If an applicant will "engage in the design of structural elements" but not "structural engineering," the applicant will be directed to take the eight-hour Civil Breadth and Structural Depth Exam. In a public comment to the Georgia State Board of Registration for Professional Engineers and Land Surveyors, NSPE President Kodi Jean Verhalen, P.E., Esq., F.NSPE, urged the board to further review the proposal before proceeding with the administrative rulemaking process. Specifically, NSPE notes that "structural elements" is not defined, leaving "all engineering disciplines questioning what the Georgia Board will consider qualifies in this category." Additionally, the proposed amendment does not explain how PEs who currently perform what the proposed rule defines as "structural engineering" would be affected. "It is not clear from the proposed rule if these individuals would be grandfathered in (and allowed to continue their practice) or would be required to be approved, and sit, for the 16hour NCEES Structural Engineering Exam," wrote Verhalen. NSPE recommends that the rulemaking be reissued for a new comment period to address these issues.

Ethical Guide to the Profession

All current NSPE individual members through their NSPE state societies and NSPE chapters (including student chapters) are invited to participate in the 2017 NSPE Milton F. Lunch Ethics Contest. New this year, NSPE's Board of Ethical Review has provided four different fact situations to choose from regarding the ethics of engineers. Contestants can choose any one out of the four situations and develop an essay, video, photo essay, poster, or PowerPoint presentation which could include embedded videos/sound, etc. to demonstrate their understanding of the facts and the NSPE Code of Ethics. The winning entry will receive a certificate, recognition in PE magazine, and an award of \$1,000 to the author.

In January, a former project manager pleaded guilty to charges of the unlicensed practice of engineering involving the alteration of engineering reports detailing structural damages of residences during Hurricane Sandy in 2012. Additional detail was provided in the February edition of the *PE Scope* e-newsletter.

Following extensive review and discussion, the NSPE Professional Liability Committee (PLC) commended the CNA Professional Liability Insurance Program as NSPE's official Commended Professional Liability Insurance Program

for 2017. The NSPE Commendation Criteria includes consideration of such issues as scope of coverage and services, commitment to professional liability market, financial stability and state regulation for protection of policy holders, availability of coverage to society members, consultation with and responsiveness to commending society, working with NSPE for the betterment of practitioners, sharing confidential information in a framework of mutual trust, protecting policy holders from predatory pricing, sharing risk management information with policy holders, and providing claims-handling experience and defense.

Results of the PLC <u>annual survey</u> on all professional liability carriers, a <u>directory</u> of carriers and information on the <u>commended program</u> can be found on the NSPE website.

As a partner in the Engineers Joint Contract Documents Committee (EJCDC), a summary of recent court decisions is prepared three times per year by EJCDC General Counsel Hugh Anderson. The latest summary is available here. This material is also a rich potential source for content and commentary in your state newsletters and for the NSPE online community Open Forum. (An example of how EJCDC is mining this material in its blog can be found here.)

Powering Professional Advancement

As engineering education accreditors work out the details of how best to prepare students for a changing profession, NSPE is strongly advocating for a place in the curriculum for teaching the value of engineering licensure. Accreditation organization ABET is revising its criteria for student outcomes and the engineering curriculum, and in January, NSPE urged ABET's Criteria Committee to explicitly reference the value of engineering licensure in its new standards. In a letter to Patricia Brackin, chair of the Criteria Committee, NSPE President Kodi Jean Verhalen, P.E., Esq., F.NSPE, pointed out, "Every state requires licensure for certain aspects of the practice of engineering. A critical component of the engineering curriculum should be ensuring that engineering students are aware of the potential that their practice may require a license." NSPE's position is that all engineering graduates should, at the very least, be required to know of and understand the role licensure plays in the practice of engineering and that each state sets forth the requirements and exemptions for licensure.

Uniting the PE Community

During the month of January, President Verhalen and I represented NSPE at a National Academy of Engineering workshop on "Engagement of Engineering Societies in Undergraduate Engineering Education," January 26-27th in Washington, DC. We were able to make key points on integrating the importance of professional licensure into undergraduate education and the work NSPE is doing to assess the future of the profession.

Kodi also attended the ASHRAE winter meeting in Las Vegas, January 28-30th.

Although a relatively light travel month, Kodi and (in particular) our regional directors continue to participate via conference call in regular, monthly regional calls and (when invited) the occasional state society board meeting. (Kodi conferenced in or attended state society board meetings last month in Connecticut and Minnesota, for example).

As NSPE's flagship publication, *PE* magazine is a wealth of news and commentary on professional issues ranging from licensing to education. Here is a list of the news and commentary the magazine's readers viewed the most last year¹.

Top Feature Stories:

- 1. <u>The Ultimate Test</u>—Professional engineers play a critical role in designing PE exams that can determine who has the right experience to protect the public.
- 2. <u>Driving the Future</u>—As autonomous vehicle development races ahead, NSPE advocates for the public health, safety, and welfare—building awareness of the licensed professional engineer.
- 3. <u>End of an Era?</u>—A new book says technology is fundamentally changing the professions. NSPE members will be investigating how PEs can adapt.
- 4. What's in a Name?—The question of how far the engineering community should go to protect the profession's good name, and by extension the public, has recently been raised in the press and in the courts.
- 5. <u>Making It a Federal Case</u>—One year ago, this polluted river drew attention to the PE's role in the federal government. NSPE is making sure that attention doesn't wane.

Top Non-Feature Stories:

- 1. <u>Technimetric' = Poetry + STEM</u>—An EIT works to bring together the arts and the technical.
- 2. NSPE Code of Ethics Helps Make 'Exemplary' Ethics Programs—The NSPE Code of Ethics is helping to strengthen college and university ethics education.
- Proposed Accreditation Changes Released for Comment—Suggested changes to the criteria used for accrediting college engineering programs are now open for public comment.
- 4. Moving Forward on an NSPE Priority: Autonomous Vehicle Safety—The federal government and state of California are pushing ahead with autonomous vehicle initiatives. NSPE is also taking action, spotlighting the importance of PEs in protecting the public.
- 5. New Day, New Look—To complement NSPE's new strategic direction and outlook, the board of directors recently approved a new logo.

¹ Rankings based on views received on NSPE's website.

Attached to this report is a detailed analysis of traffic to the NSPE website from October through December 2016. Key findings include:

- 221,560 users visited the website, generating 316,531 sessions, 815,299 page views.
- On average, users viewed 2.58 pages per session with an average session duration of 2.17 minutes.
- 33% of website visitors were returning visitors, an increase of 4% since last quarter.
- 66% of the traffic to NSPE.org was the result of searches (Google, Bing, Yahoo). The following key words were used in an external search that brought people to the website: nspe; professional engineer; national society of professional engineers; fe; pe; engineering ethics; nspe code of ethics; professional engineer license; pe engineer; engineer code of ethics; professional engineer exam.
- Top ten most visited pages: Code of Ethics (67,000); homepage (56,000); What is a PE? (47,000); How to Get Licensed (23,000); Board of Ethical Review Cases (19,000); PE Institute (13,000); Managing My Account on nspe.org (13,000); Site Search (12,000); Eweb Student Upgrade (12,000); Join Now (11,000).
- Most popular download: Code of Ethics for Engineers (12,000)

The Top Ten Federal Engineer of the Year (FEYA) honorees for this year have been announced. This <u>list</u>, as well as a list of all agency winners, can also be found on the website. Tickets for the FEYA Awards Luncheon (February 17 at the National Press Club in Washington, D.C.) can also be purchased on the FEYA website. Major General Timothy S. Green, US Air Force Director of Civil Engineers, will be the keynote speaker.

Engineers Week (February 19-25) is fast approaching. A <u>social media calendar</u> of key dates and aids to effectively share/retweet on EWeek events is available on the website. As part of Future City's 25th Anniversary celebration, you can continue to follow and share the "25 Voices of Future City" posts on <u>Facebook</u> and via the #FutureCity25 hashtag on <u>Twitter</u>. The EWeek Foundation (dba DiscoverE) has a rich set of resources available to support local engagement in EWeek celebrations, including a library of over 130 new and updated <u>engineering activities</u>; online <u>teacher training</u> to bring engineering into the classroom; and <u>career exploration</u> features.



NSPE member Bruce Westerman, P.E., was sworn into his second term in office representing Arkansas' 4th district by House Speaker Paul Ryan on January 3rd. Westerman has supported NSPE's effort to advocate for the critical role of the professional engineer on federal projects, particularly following the Gold King Mine pollution disaster in 2015².

As part of the NSPE Business Plan objective to increase membership and engagement within the PE community, President Verhalen has personally been working hard to increase Enterprise membership (an offering that makes it easier for firms to enroll multiple staff in membership, at discounted dues rates). Working with NSPE membership staff, a new Enterprise marketing brochure ("Successful Employees Make Successful Business") and fact sheet have been prepared, which she is personally distributing to a large engineering firm to encourage more of their PEs to join the community. This resource has been added to the NSPE website for download.

NICET

Financially speaking, NICET is in very good shape through the first four months of the fiscal year, with NICET revenues through October standing at \$1,493,043 (or 98.72% of year-to-date targets) and NICET expenses at \$1,361,337 (or 88.73% of year-to-date targets). In total, NICET is showing a positive Change in Net Assets of \$120,018.

With regard to certification program development/conversion, we are currently onpace to complete the program conversions per Business Plan objectives. Significantly, Certification Services staff is successfully reducing the average time needed to complete candidate evaluations, going from an average of over 65 days in July to under 45 days by November. We expect to be able to regularly maintain the Business Plan target of 30-45 days on average by July 2017.

On the communication front, the December issue of *News from NICET* was sent out on December 22nd to just over 11,000 subscribers. Staff has also been busy coordinating communications about the launch of the Transportation Construction Inspection (TCI) program – with a newsletter article, and updated information and application forms on the NICET website, and other more direct e-mail communications. At the same time, staff has been reaching out to certificants who did not renew their certification(s) in November including calls and follow up e-mails to 212 certificants, with approximately 111 of those individuals recertifying since the communications effort began. Going forward, a hard-copy renewal notice to all expiring certificants will go out two months prior to their expiration date and

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² Photo Credit: The Office of Speaker of the House Paul Ryan.

we are investigating sending a text renewal reminder a week or two later. NICET has also launched an effort to capture and track a Net Promoter Score survey for its customers.

And remember, you always have access to 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. Current board members can access an online library of board meeting materials (past, current and future) through the online board book site, (BoardBookIt).

If you want to review NSPE's history and how that has been translated into current plans with a future-focus, NSPE's purpose, mission, vision and a history of the *Race for Relevance* and the resulting Strategic Plan is summarized in a section called "Who We Are and What We Do."

NSPE.org Web Analytics Quarterly Report FY 2016-17 Q2 Report (October - December 2016)

The purpose of this report is to help us know our visitors and how our website is performing. The key findings are listed at the beginning of the report.

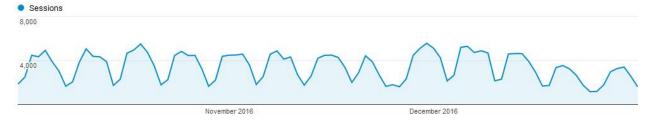
Key findings of this report:

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- On average, users viewed 2.58 pages per session with an average session duration of 2.17 minutes.
- 33% of website visitors were returning visitors, an increase of 4% since last quarter.
- 66% of the traffic to NSPE.org was the result of searches (Google, Bing, Yahoo). The following key words were used in an external search that brought people to the website: nspe; professional engineer; national society of professional engineers; fe; pe; engineering ethics; nspe code of ethics; professional engineer license; pe engineer; engineer code of ethics; professional engineer exam.
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- Most popular download: Code of Ethics for Engineers (12,000) https://www.nspe.org/sites/default/files/resources/pdfs/Ethics/CodeofEthics/Code-2007-July.pdf

EFFECT/IMPACT

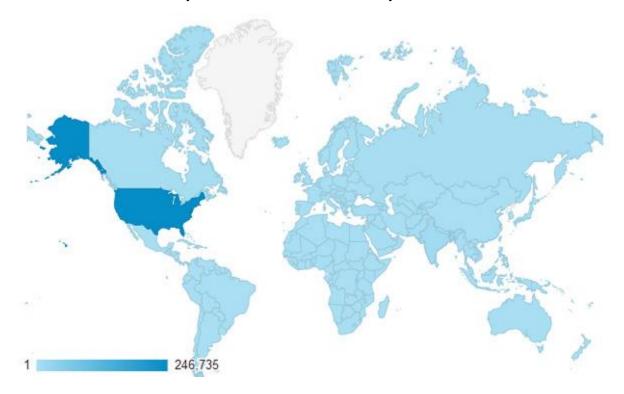
1. How many people visited the website?

221,560 users visited the website, generating 316,531 sessions and 815,299 page views.



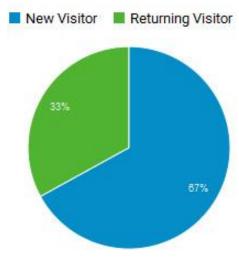
How visitors flow: Visits to the site are highest Monday, Tuesday, and Wednesday, then begin to fall off with Saturday being the least visited day of the week. The above graph shows a drop in visits over the weekend.

The geographical distribution of visitors is mostly from the US (78%), followed by India (4%), Malaysia (2%), Canada (1%), United Kingdom (1%), Philippines (1%) and other countries make up less than 1% of the distribution: Russia, Turkey, Saudi Arabia, Pakistan and many more.



PERFORMANCE/ENGAGEMENT

- 2. How engaged were visitors while on NSPE.org? There are a few metrics to look at for engagement:
- **Bounce Rate** 58.72%
- Average pages per session 2.58
- **Average time on site** 2.17 minutes
- **Percent new visitors** 67% vs. **returning visitors** 33%



Bounce rate is the percent of visitors who looked at only one page on the site, and then immediately left. This can be a measure of engagement. High bounce rates can mean the content didn't live up to the visitors' expectations. High bounce rates of about 70% can indicate the content doesn't match expectations. This quarter's bounce rate (58%) is slightly lower than last quarter's rate (61%).

Returning visitors (33%) are up from the last quarter (29%). This could reflect visitors are coming back to the website because they find the content helpful.

TRAFFIC SOURCES

3. Where do these visitors come from?

66% of visitors came from search (Google=60%; Bing; Yahoo), 18% came directly to the site (by typing in the address or using bookmarks or e-mail links), and the remaining 15% came from links on other websites (referrals – all websites that link to our site includes social media.) Social media accounts for 1% of referrals.

24% of traffic is coming from mobile devices and 2% of traffic is coming from tablet. This information can help drive decisions when developing mobile apps.

54% of visitors are using Chrome as a browser, followed by Safari (16%), Internet Explorer (15%), Firefox (8%), Edge (4%) and a few others.

SOCIAL TRAFFIC

4. Where does social traffic originate? We can identify the social networks where people engage with our content. This section will help us learn about each and identify our best performing content on each social network.

Social media accounts for 1% of referrals or 3,830 sessions. Reddit makes up the majority with 1,189 sessions, followed by Twitter (1,044 sessions), Facebook (966), and LinkedIn (373 sessions) on the social networks.

On Reddit with 1,189 sessions, people shared links to the following pages: NSPE.org (942 sessions); Code of Ethics (89 sessions); How to get Licensed (44 sessions).

On Twitter with 1,044 sessions, people shared links mostly to NSPE.org (813).

On Facebook with 966 sessions, people shared links to various pages. The most popular were "What is a PE?" and the Code of Ethics.

SEARCH TERMS

5. What were our users looking for? What keywords did people search for that brought them to the website?

The following is a list of external search words:

- nspe;
- professional engineer;
- national society of professional engineers;
- fe; pe;
- engineering ethics;
- nspe code of ethics;
- professional engineer license;
- pe engineer;
- engineer code of ethics;
- professional engineer exam.

BEGINNINGS

6. Where do visits begin? What percentage started on the homepage? This is good to know for your first impression from users.

17% of traffic to the site began on the "Code of Ethics" page; 13% began on the "What is a PE" page; 11% began on the homepage; 4% on the "How to Get Licensed" page; and 3% began on the "Ten Fun and Exciting Facts About Engineering" page.

16% of the visits that began on a "Code of Ethics" page left the site without viewing any other pages. The remaining visitors continued to other sections of the sites: Ethics; Board of Ethical Review Cases; Code of Ethics Examination; and Site Search (281 sessions).



CONTENT INTERESTS

7. What pages are users viewing?

Top ten most visited pages: Code of Ethics (67,000 sessions); homepage (56,000 sessions); What is a PE? (47,000); How to Get Licensed (23,000); Board of Ethical Review Cases (19,000); PE Institute (13,000); Managing My Account on nspe.org (13,000); Site Search (12,000); Eweb – Student Upgrade (12,000); Join Now (11,000).

Primary navigation sections: Resources (47%), Eweb (Shop NSPE and My Account Profile 22%), Membership (9%) received 78% of the total page views.

Within Resources on the primary navigation "Licensure" and "Ethics" received the most page views.

Within Membership on the primary navigation "Join Now", "Member Benefits", and "About NSPE" received the most page views.

Most popular download: Code of Ethics for Engineers PDF (12,000) https://www.nspe.org/sites/default/files/resources/pdfs/Ethics/CodeofEthics/Code-2007-July.pdf

SHARING & PRINTING

8. What content is being shared and printed?

Website visitors can easily share or print content on the website using the share icons on all pages. Visitors have printed 170 pages and shared a number of pages using the following channels: E-mail (26); Facebook (99); LinkedIn (53); and, Twitter (62).

There's a wide range of pages being shared and printed on the site.

The following pages are being printed: Code of Ethics; Demonstrating Qualifying Engineering Experience Licensure; What is a PE; Liability of Employed Engineers.

The following are a few pages that are being shared on Facebook and Twitter: What is a PE; Code of Ethics; PE Magazine.

HOMEPAGE ANALYTICS

- 9. Where are users going from the homepage? Once on the homepage on the left side navigation, visitors navigated to:
- Log In (13%),
- Join Now (3.8%)
- Why Join (1.5%)
- Renew Now (3.4%)
- Member Benefits (3%)
- Types of Membership (2.4%)
- About NSPE (2.9%)
- Who We Are & What We Do (1.2%)
- Licensure (3%)
- Continuing Education (5.1%)
- Ethics (5.5%)
- Issues and Advocacy (1.1%)
- Career Center (1.3%)
- Interest Groups (0.3%)
- Professional Liability (0.4%)
- Partners and State Societies (0.5%)
- News & Publications (0.8%)
- Blogs (0.4%)
- Students (1.2%)
- NSPE Educational Foundation (0.3%)
- PE Conference (0.6%)
- Press Room (0.2%)
- Podcasts (0.1%)
- Professional Engineers Day (0.2%)
- NICET Certification (0.2%)
- Calendar of Events Green Button (0.4%)

A small percentage of visitors (0.4%) clicked on links on the right hand column of the page.

The bounce rate on the homepage is 31.64%, an excellent indication that the page effectively encourages visitors to view more pages and dig deeper into the site. Website visitors spend an average of 1.25 minutes on the homepage.

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 e-mail. The full report (and past reports) can always be found online.