

An official NCEES publication for the exchange of information, opinions,
and ideas regarding the licensure of engineers and surveyors



Headquarters Update

NCEES expands subject matter expert training

DAVY MCDOWELL, P.E. | NCEES CHIEF EXECUTIVE OFFICER

I TRUST EVERYONE HAD A SAFE AND ENJOYABLE holiday season. As we closed out 2024 and move into 2025, I was reminded of how busy the months of January, February, and March are for NCEES.

This is the time of year that the NCEES standing committees really get to work. The fall had a few in-person meetings and a number of virtual meetings, but January, February, and March will be busy with committee work. Toward the end of this issue, you will see the Upcoming Events section. Scan through the list. There are a number of exam committee meetings, standing committee meetings, the board of directors meeting, and a meeting of POLC.

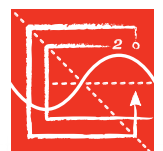
I want to highlight one meeting that is of particular interest to me: Subject Matter Expert Training in March. For as long as I have been with NCEES, nearly all of the question writing and review has been done in-person at NCEES headquarters. During the first part of the COVID-19 pandemic, we started using virtual exam meetings because travel was limited. We figured out a way to successfully grade the PE Structural exam constructed-response questions virtually, and we still use virtual meetings to supplement our in-person meetings. This endeavor is taking it a step further.

Our plans are to bring in 40 subject matter experts in various engineering and surveying disciplines to train them on understanding minimal competence, the art of item (question) writing, and on the use of our item-writing software. The subject matter experts will be split into two groups of 20; these two groups will each meet twice for in-person trainings over the next few months. Between the two meetings, these groups will essentially have a homework assignment: writing items for the committee review.

After the second training, the subject matter experts will become remote item writers, potentially invited to in-person exam development meetings. Our item banking software system is secure, so opening it up for more remote item writing makes sense.

Why go through all of this? First, our item banks on the larger-volume exams need to be bolstered. A psychometrician told me years ago, “Computer-based exams have an insatiable appetite for questions.” That is probably not the way I would have worded it, but I got the picture.

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FROM THE PRESIDENT



ANDREW ZOUTEWELLE, P.L.S.
NCEES PRESIDENT

Should non-boundary surveyors be able to receive a license?

NCEES MODEL RULES PROVIDE A DETAILED definition of professional surveying. Activities that are included and activities that are excluded from the practice of surveying are cited in Section 210.25. These activities included within the definition of surveying are conducted by competent licensed professionals within practice areas such as boundary surveying, hydrographic surveying, geodetic surveying, and photogrammetric surveying. Currently, the NCEES Principles and Practice of Surveying (PS) examination tests competency within these areas, but with an emphasis on boundary surveying. However, many surveyors practice exclusively within the other three practice areas and do not practice any boundary surveying activities at all. This disconnect has given rise to a question within NCEES: Should a licensure pathway be available to non-boundary surveyors in order to remove the obstacle of having to pass an examination, which is heavy on boundary law questions?

The *Model Rules*—and also the laws of most of our United States and territories—include these non-boundary areas of surveying within licensed practice, and therefore these practice areas are subject to the oversight of most jurisdictional licensing boards. Moreover, these non-boundary areas of surveying practice are important to the health, safety, and welfare of the public. The following examples illustrate why.

Hydrographic surveyors

Hydrographic surveyors provide a foundation for safe navigation within our waterways. They map underwater obstacles, monitor shipping channel depths, and provide data needed for ships to pass safely underneath bridges. Currently, to become a licensed surveyor, all applicants must pass a boundary law examination to achieve a professional

surveying license in most jurisdictions. However, licensure applicants who only wish to practice hydrographic surveying should be tested in the areas in which they will provide services and do not need to be tested on boundary surveying to protect the public.

Geodetic surveyors

Geodetic surveyors establish large-scale measurement datums for highly accurate measurements of the earth's natural and man-made features. They support real-time monitoring of earthquake fault lines and subsidence of the earth's surface. They provide elevation control, which is used to determine whether homes located within special flood hazard areas will be inundated by flooding or whether these homes are elevated properly above flooding risk levels.

On a smaller scale, a related group of surveyors also conduct real-time measurements of at-risk buildings to detect settling that indicate potential building collapse and survey monitoring of dam structures to detect signs of potential dam failure. Furthermore, surveying underground features, such as utility line locations and depths, are conducted by these surveyors. Again, all applicants for a surveying license currently must pass a boundary law examination to achieve professional licensure. However, applicants who only wish to practice geodetic surveying should be tested in the areas in which they will provide services and do not need to be tested on boundary surveying to protect the public.

Photogrammetric surveyors

Photogrammetric surveyors use aerial methods to model the earth's surface and man-made features for certain critical purposes that affect the public, including flood plain mapping, roadway and site design surveys, landslide debris flows, and the measurement of airport features and flight

path clearances. These aerial surveying methods include both aircraft-based and drone-based photogrammetry and LiDAR. Ground-based LiDAR can also be used for some of these critical tasks that affect the public. Licensure applicants who only wish to practice photogrammetric and LiDAR surveying do not need to be tested on boundary surveying.

Surveying and Mapping Sciences Licensure Task Force
NCEES members will receive reports from the Surveying and Mapping Sciences Licensure Task Force at the zone meetings this spring. The task force has identified that the existing PS exam specification blueprint has an emphasis on boundary surveying, which creates a barrier to licensing for several sectors of the surveying community. I anticipate

that the task force will encourage removing unnecessary obstacles from the path to non-boundary surveying licensure. This task force is not charged with widening the scope of licensed practice nor with adding multiple additional examinations for all applicants. In short, member boards will be asked to consider whether now is the time to open this new and separate non-boundary pathway to surveying licensure for those who want or need a professional surveying license.

I urge you to think critically and constructively as recommendations come back from the Surveying and Mapping Sciences Licensure Task Force this spring. Thank you for your enthusiasm and dedication to the NCEES mission.

HEADQUARTERS UPDATE

continued from cover

We feel like we can recruit a different sector of volunteers this way. For engineers and surveyors who do not want to travel to Greenville, South Carolina, for a weekend two or three times per year, this allows for writing exam questions at any time and not just at NCEES headquarters. It will allow for younger engineers and surveyors who cannot take time from work or family like some others who are more established in their careers to participate.

The same processes we use for approving items will be in place for items written remotely. There will still be two or more reviews by other subject matter experts. If the item is rejected or needs correcting, it will go back to the item writer for editing, and the process will start over with subject matter experts reviewing the revised item.

We will evaluate the program over the next several years and go from there. We do not foresee going to all-remote item writing. If you have ever witnessed an in-person exam meeting, you have seen that the discussions and review of the questions are what make our exams as reliable as they

are. We see this as a way to make things better—which by the way, seems like a good way to kick off the new year.

I would be remiss to not mention that NCEES CEO David Cox's last day with us was January 31. David has been involved with NCEES through his time with the Kentucky board and as NCEES CEO for over 25 years. As I told staff as we presented him with a retirement gift, David has a long list of accomplishments during his time with NCEES. But most importantly, he is someone you can count on and trust to provide solid feedback. He will be missed.

I look forward to seeing everyone at the zone interim meetings starting in April, and put the State of the Council dates on your calendar. Our goal is to keep our members as informed about NCEES happenings as possible. Here's to another productive year with exciting plans on the horizon.

MEMBER BOARD BRIEF



JOHN GREENHALGE

OHIO STATE BOARD OF REGISTRATION FOR
PROFESSIONAL ENGINEERS AND SURVEYORS
EXECUTIVE DIRECTOR

MBA Committee working on several important charges in 2025

LIKE MOST NCEES COMMITTEES, THE COMMITTEE on Member Board Administrators (MBA) is tasked with charges that assist in promoting licensure, making sure NCEES policies and procedures are updated, and providing recommendations and potential solutions to issues encountered by member boards.

This year, the MBA Committee is tasked with several important charges, including

- Reviewing how member boards can prevent fraud in the use of digital signatures and electronic submissions
- Reviewing the NCEES BIM Guidelines
- Continuing to study ways to standardize continuing professional competency requirements across jurisdictions
- Investigating how member boards can address minor violations of the registration act by licensees
- Considering whether “member board executive” is a better descriptive term than “member board administrator” to describe the responsibilities of member board staff directors

In addition to these charges, the committee is reviewing the MBA orientation process and looking at ways to mentor new MBAs. As with other organizations, NCEES is faced with challenges involving turnover and the loss of institutional knowledge among its members. To mitigate this, it is crucial that we as an organization are identifying new members and reaching out to not only make them feel welcome, but to develop new leaders within the organization.

The committee is also charged with identifying ways to encourage member boards who are not as active in the

organization to participate in NCEES activities, such as national and zone committees, annual and zone interim meetings, MBA Basecamp, and MBA meetings.

This is important because while we are all separate boards with our own state laws and rules, many of the issues that each board deals with have likely been encountered by other members. The more we communicate and pass on best practices and solutions, the more efficient and effective we become. Working together closely will make our efforts at fulfilling our mission easier and more consistent.

The committee is also charged with developing agendas and providing leaders for all MBA meetings at the annual meeting, zone interim meetings, and MBA meetings. The committee works with NCEES staff to develop programs, both in person and through webinars, to provide information and training. At the annual meeting last year, NCEES hosted an MBA professional development program by genWHY Communication Strategies Managing Partner and Lead Trainer Kristin Scroggin. Titled *Bridging Perspectives—Navigating a Multigenerational Workforce and Mastering Nonverbal Communication*, the program dealt with how organizational leaders can understand and communicate effectively with different generations. It was very well received, and the committee will be working with NCEES staff to identify similar quality programs for the upcoming annual meeting in New Orleans.

The committee is also working with the Committee on Law Enforcement to study how member boards can prevent fraud in the use of digital signatures and electronic submissions. With emerging computer technology and global access to information around the world, it is becoming increasingly easier for bad actors to steal licensees’ information and

identities and use that information on engineering and surveying work products that were not prepared in accordance with law or accepted standards of practice. At the 2024 annual meeting, many boards reported an increase in the number of investigations involving the misappropriation of licensees' identities and seals by firm offering "review and seal" services. The MBA and Law Enforcement committees are exploring ways that NCEES member boards can address this emerging problem now and in the future.

The full list of MBA Committee charges is posted online in E3 within MyNCEES. The committee will give a preliminary report on its activities at the 2025 zone interim meetings this spring.

Greenhalge is executive director for the Ohio board and chair of the 2024–25 Committee on Member Board Administrators.

NCEES opens 2025 Engineering and Surveying Education Award competitions

NCEES LAUNCHED THE 2025 CYCLE OF ITS AWARD programs in January and is now accepting applications for the 2025 Engineering Education and Surveying Education awards.

Engineering award

The NCEES Engineering Education Award recognizes college engineering programs for engaging their students in collaborative projects with licensed professional engineers. It was established to promote understanding of the value of licensure and to encourage partnerships between the engineering profession and education.

Entries are due by May 1. EAC/ABET-accredited programs from all engineering disciplines are invited to compete for

- Grand prize: \$25,000
- Up to seven awards: \$10,000 each

Profiles of the 2024 Engineering Education Award winners are posted at ncees.org/2024engawardprofiles. For details on competing for this award, visit ncees.org/award.

Surveying award

NCEES is also preparing for the 2025 NCEES Surveying Education Award competition, which includes a new path. The competition is now comprised of two categories: one for two-year schools with an articulation agreement

Entries for the Engineering and Surveying Education awards are due by **May 1**.



with a four-year school and one for all other programs. Both recognize surveying/geomatics programs that best reflect NCEES' mission to advance licensure for surveyors in order to safeguard the health, safety, and welfare of the public.

Entries are due by May 1 for both categories.

- Grand prize: \$25,000
- Up to two awards: \$15,000 each
- Up to two awards: \$10,000 each

NCEES invites all other surveying/geomatics programs to compete for

- Grand prize: \$25,000
- Up to two awards: \$15,000 each
- Up to two awards: \$10,000 each

Profiles of the 2024 NCEES Surveying Education Award winners are posted at ncees.org/2024surveyawardprofiles. Entry information is available at ncees.org/surveyingaward.

ENFORCEMENT BEAT

Member boards share how they address enforcement challenges

THE NCEES COMMITTEE ON LAW ENFORCEMENT asked member board members, associate members, and investigators a series of questions related to enforcement challenges. This is the second part of a two-part series.

This installment includes answers from Michael Clendaniel, P.E., member of the Delaware Association of Professional Engineers; Tiffany Criswell, assistant executive officer for the California Board for Professional Engineers, Land Surveyors, and Geologists; and Jill Short, investigations and compliance manager for the Washington State Board of Registration for Professional Engineers and Land Surveyors. The responses have been lightly edited for clarity.

What are your board's biggest enforcement challenges, and how are you addressing them?

Clendaniel: Our board's biggest challenge is getting through investigations in a timely manner. Our investigations are performed by volunteers, so investigations are done on their time. To help with the issue, we hired an investigator/educator to gather a lot of the upfront information and to help our law enforcement committee members to gather technical information.

Criswell: One of our board's enforcement challenges is addressing and deterring unlicensed practice. The major fraud being perpetrated nationwide through freelancing websites, such as Freelancer and Upwork, is the biggest concern. We are addressing it by coordinating with our various law enforcement agencies to have better outreach to these populations since it is difficult to locate these individuals to take action.

Short: One of our biggest issues is lack of communication between the respondent and the clients. This is unprofessional conduct in our rules. If it's a first-time occurrence, we conduct remedial counseling with the licensee. If there are several occurrences, we would proceed to a statement of charges.

Would your board consider taking disciplinary action based on another board's consent order/settlement agreement for an individual/firm licensed in your state? When is it appropriate to take that disciplinary action?

Clendaniel: Yes, we take disciplinary action if it is not reported to our board in a timely fashion, especially during the license renewal or if it occurred in our state.

Criswell: Our board has the authority to take disciplinary action. Our authority extends only to behavior that would be a violation in our state and have significance enough to determine it was in the public's best interest to publicly acknowledge it. Our board tries to avoid "piling on" just for the sake of utilizing that authority.

Short: When we are notified of disciplinary action in another state, we look at the original violation. If it is what we consider minor (not having a COA, license expired, etc.), we do not take action. If there was a violation of health, safety, or public welfare, we would open an investigation and look into work that has been conducted in our state. We may take action if there are violations here.

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How does your board handle noncompliance with continuing education? What sanctions are appropriate? Should continuing education violations impact a licensee's Model Law Engineer (MLE) or Model Law Surveyor (MLS) status?

Clendaniel: We require each licensee to acknowledge completion of continuing education during the license renewal process. We audit around 5–10 percent, and if we find you didn't complete them, we will pursue enforcement for that and an ethics violation. Yes, they should impact a MLE or MLS status.

Criswell: Our board does not require continuing education at this time. However, we do believe that an impact to MLE or MLS status should be considered.

Short: If an individual is not in compliance with continuing education, we would give them an opportunity to make up any credits they may be short. Unless they are under a current investigation and do not have the appropriate CEs, we may charge and require them to obtain them.

How does your board handle licensees/registrants who ignore a board's correspondence?

Clendaniel: They would be handled by our appointed department of justice attorney.

Criswell: Our board has the authority to take action against its licensees for failing to respond to written requests from board staff related to complaint investigations. It typically begins with an administrative citation with an assessed fine and instruction to respond. Failure to comply with the citation subjects them to further action.

Short: We make several attempts to get a response. If we do not get one, we charge for not cooperating with an investigation. Our laws cover the amount we can charge someone. We currently start with a \$5,000 fine per violation.

Does your board have guidelines that are used to consistently apply disciplinary actions? How does your board ensure consistency when imposing penalties?

Clendaniel: Yes, we have a matrix for each disciplinary action that accounts for the severity to provide the penalty.

Criswell: Our board does not have specified guidelines but rather considers other actions of similar nature, most importantly serious failure to meet the standard of care or previous complaint history.

Short: Our laws/rules have amounts we can charge for fines. We keep an index of past violations and what the charges/fines were for each past case.

Clendaniel and Criswell are members of the 2024–25 NCEES Committee on Law Enforcement.

Zones prepare for 2025 interim meetings

AS SPRING NEARS, ALL FOUR NCEES ZONES ARE gearing up for their respective zone interim meetings.

The member licensing boards of NCEES are divided into four geographic zones: Central, Northeast, Southern, and Western. The zones meet twice a year—at the NCEES annual meeting in August and at the interim meeting in the spring.

This year, the Central and Western zones will hold a joint interim meeting. The Northeast and Southern zones will hold separate meetings. All meetings will include a welcome reception, professional forums, and multiple business sessions.

The dates and locations for each zone interim meeting are as follows:

Northeast Zone

April 10–12 | Cambridge, Massachusetts

Southern Zone

April 24–26 | Little Rock, Arkansas

Central and Western Zone

May 15–17 | Albuquerque, New Mexico

Issues on the agenda

Representatives from member licensing boards will hear and discuss reports from current standing committees and task forces. The work of the committees and task forces results in motions that will be presented for the Council vote at the annual meeting in August. Zone meeting delegates can ask questions and discuss possible annual meeting motions, and they are encouraged to take information back to their boards for further discussion.

Forums for engineers, surveyors, and member board administrators will be available to discuss topical professional issues, and the Southern Zone will also hold a forum for law enforcement staff. Member boards will have an opportunity to provide activity updates.

Meeting registration

Online registration for the Southern and Northeast zone meetings is now open. Registration for the Central/Western Zone joint interim meeting opens mid-February. A link to online registration, as well as more details on the meetings, is in the Board Resources section of ncees.org/resources (see Zones under Board Resources).

Additionally, zones will hold the following elections:

- Central Zone—zone secretary
- Northeast Zone—zone vice president, assistant vice president, and president-elect nominee
- Southern Zone—zone vice president and assistant vice president
- Western Zone—zone secretary

“The main purpose of the zone meetings is to prepare for the business sessions at the annual meeting in August,” said NCEES Chief Executive Officer Davy McDowell, P.E. “The best way to prepare for your zone interim meeting is to review the materials distributed by NCEES in advance.”

Save the date for the 2025 NCEES annual meeting



The 104th NCEES annual meeting will take place August 19–22 in New Orleans, Louisiana, at the Sheraton New Orleans. The annual meeting is the culmination of the Council’s work for the year.

Delegates will meet to decide key licensure issues and explore a melting pot of cultures throughout the city. The agenda offers opportunities to

- Vote on issues at the business sessions, including the election of a new president-elect, as well as motions presented by the 2024–25 committees and task forces

- Discuss professional issues at the forums for engineers, surveyors, member board administrators, and enforcement staff
- Network and share ideas with delegates and guests at social events

Registration will open in the spring for member board members, emeritus members, and staff. More meeting details will become available in the Member Resources section of ncees.org/resources (see “Annual meeting” under Board Resources).

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NCEES

OUTREACH

The following are recent and upcoming NCEES outreach activities to promote engineering and surveying licensure. For the latest outreach news, follow NCEES on Facebook, LinkedIn, and X, formerly known as Twitter. Visit ncees.org for links to its social media pages.

NSBE Annual Convention

NCEES will participate in the National Society of Black Engineers Annual Convention in Chicago, Illinois, on March 6–7, 2025, to promote engineering licensure.

Future City Competition

NCEES is sponsoring the NCEES Best Land Surveying Practices Award at the Future City Competition national finals in Washington, D.C., on February 15–18, 2025.



NCEES outreach volunteers judge the DiscoverE's Future City Competition in Washington, D.C., in February 2024.

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UPCOMING EVENTS

FEBRUARY 3-4

PE Agricultural and Biological
Exam Meeting
Greenville, South Carolina

FEBRUARY 5-6

PE Fire Protection Exam Meeting
Greenville, South Carolina

PE Metallurgical and Materials
Exam Meeting
Greenville, South Carolina

PE Petroleum Exam Meeting
Greenville, South Carolina

FEBRUARY 7-8

Education Committee Meeting
Greenville, South Carolina

EPE Committee Meeting
Greenville, South Carolina

Licensure Committee Meeting
Tampa, Florida

FEBRUARY 13-14

PE Structural Exam Meeting
Virtual

FEBRUARY 16-22

DiscoverE Engineers Week

FEBRUARY 20-21

Board of Directors Meeting
Napa, California

FEBRUARY 21-22

PE Industrial and Systems
Exam Meeting
Virtual

PE Mechanical Exam Meeting
Greenville, South Carolina

FEBRUARY 27

PE Environmental Exam Meeting
Virtual

FEBRUARY 28-MARCH 1

PE Chemical PAKS Creation
Meeting
Greenville, South Carolina

Surveying and Mapping Sciences
Licensure Task Force Meeting
Dallas, Texas

MARCH 6-8

PE Structural Exam Meeting
Greenville, South Carolina

MARCH 7

Finance Committee Meeting
Nashville, Tennessee

MARCH 7-8

PE Nuclear Exam Meeting
Greenville, South Carolina

MARCH 14

POLC Meeting
Greenville, South Carolina

MARCH 16-22

National Surveyors Week

MARCH 18

Foundation Board of Directors
Meeting
Virtual

MARCH 19

Awards Committee Meeting
Virtual

MARCH 20-21

PE Naval Architecture and Marine
Exam Meeting
Greenville, South Carolina

MEMBER BOARD NEWS

Arizona

Barrett Lindsey is a new appointee.
Kileen Lindgren is no longer a member.

Delaware PE

Mark Scarborough is a new appointee.
Karen Maxson is no longer a member.

Florida PS

Andrew Getz and Jim Sullivan are new
appointees. Christopher McLaughlin
and David Schryver are no longer
members.

Maine PS

Bruce Martinson is a new appointee.

Washington

Matthew Rasmussen is a new
appointee. James Wengler is no longer
a member.

MARCH 21-22

PE Mining and Mineral
Processing Exam Meeting
Greenville, South Carolina

PLSS Exam Meeting
Greenville, South Carolina

Subject Matter Expert Training
Greenville, South Carolina

MARCH 28-29

PE Electrical and Computer
Exam Meeting
Greenville, South Carolina



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James Kelly, P.E.
Southern Zone Vice President
Virginia

Aaron Blaisdell, P.L.S.
Western Zone Vice President
Washington

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Licensure EXCHANGE

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Square are you?



Members, staff, and family of the Arkansas Board of Licensure for Professional Engineers and Professional Surveyors visited the Berghoff Restaurant for dinner on August 15, 2024, during their visit to Chicago for the 103rd NCEES annual meeting. Pictured (l-r) are Kyle Salyer, P.E., P.S.; Heather Richardson; Kelly Salyer; Murry Cline, P.E.; Tammy Cline; Dave Beasley, Ph.D., P.E.; Jan Beasley; Keith Sikes; and Grant Grigg.

NCEES has launched an initiative featuring the all-new Square bandana. NCEES members and staff are encouraged to take pictures with their Square on personal or business trips to help spread licensure awareness around the world.

Submit your Square photos—including your name(s), member board, and location details—to outreach@ncees.org for a chance to be featured in *Licensure Exchange*.

Square photo submission tips



- Make sure your photo is high-resolution
- Include your name(s), member board, and location details
- Send your submission to outreach@ncees.org