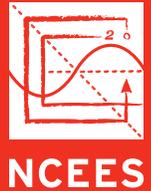


Licensure EXCHANGE

AUGUST 2015
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MARQUETTE UNIVERSITY WINS 2015 NCEES ENGINEERING AWARD

Top project opens new opportunities for rural communities in Guatemala

The winners of the NCEES Engineering Award for Connecting Professional Practice and Education have been named, with the grand prize going to the Marquette University Department of Civil, Construction, and Environmental Engineering. The award jury met June 2, 2015, in Clemson, South Carolina, to select the \$25,000 grand prize winner.

The department received the top prize for its submission, *Sechum Vehicle Bridge*. For the project, civil engineering students worked as part of a team that also included faculty, professional engineers with specific technical backgrounds to support each discipline on the project, other professionals, and more than 100 community volunteers from the Mayan community of Sechum in Guatemala. The team designed and constructed a vehicle bridge, which impacted three rural communities seeking safe, reliable crossing of the Rio Pasaguay to access education, markets, and health care.

The jury praised the project for its strong interaction with professional engineers as well as its improvements to the quality of life in this community.

The jury selected five additional winners to receive awards of \$7,500 each:

- University of Arkansas at Little Rock
Department of Construction Management and Civil and Construction Engineering
American Red Cross of Greater Arkansas Seismic Retrofit Feasibility Study
- The Citadel
Department of Civil and Environmental Engineering
Multidisciplinary Evaluation and Rehabilitation Design of Sacred Heart Catholic Church
- George Mason University
Sid and Reva Dewberry Department of Civil, Environmental, and Infrastructure Engineering
Water Supply, Distribution, and Storage Sabana Grande, Nicaragua
- University of Nebraska–Lincoln
Charles W. Durham School of Architectural Engineering and Construction
Multidisciplinary Vertical Farm Design
- Seattle University
Department of Civil and Environmental Engineering
Seismic Analysis and Retrofit Design of a Historic Substation Control Building

The NCEES Engineering Award recognizes engineering programs that encourage collaboration between students and professional engineers. EAC/ABET-accredited programs from all engineering disciplines were invited to submit projects that integrate professional practice and education.

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NCEES names winners of #PSnoboundaries competition

National geocaching contest promotes surveying as a career without boundaries

ON MARCH 17, NCEES RELEASED 2,500 NCEES SURVEYOR Trackables to geocachers across the country to celebrate National Surveyors Week. The mission: to encourage people to turn their passion for technology and the outdoors into a career as a professional surveyor.

NCEES partnered with Geocaching.com for this national campaign to increase public awareness of the surveying profession. They distributed the trackables to geocachers nationwide, who put them in hidden containers called geocaches and logged their locations online.

To enter the accompanying #PSnoboundaries photo contest, participants took a photo of themselves with their NCEES Surveyor Trackable at a National Geodetic Survey (NGS) marker and shared it on Facebook or Twitter using the hashtag #PSnoboundaries.

“Geocaches are found all over the world, but for this competition, we wanted to focus on NGS markers, or benchmarks,” said Nina Norris, NCEES Director of Public Affairs. “These surveying markers are all around us, but they usually go unnoticed. This is a fun way to draw attention to surveying in everyday life.”

What is geocaching?

Geocaching is a real-world, outdoor treasure hunting game in which participants, known as geocachers, use GPS-enabled devices to find the geocaches. The geocaches contain a log book and perhaps treasure, such as an NCEES Surveying Trackable. Trackables are geocaching game pieces. Each has a unique number so that it can be tracked on geocaching.com as it moves around. Visitors may take the trackable, but they then have to move it to a new location and log it on geocaching.com.

More than half of the 2,500 NCEES Surveyor Trackables have been activated and are currently traveling the world. To date, they have been hidden in more than 52,000 locations and traveled over 2 million miles. And they don't appear to be slowing down anytime soon. On an average day, approximately 20 NCEES Surveyor Trackables are moved and logged.



#PSnoboundaries photo contest winner Robert Cizauskas and his children hide their NCEES Surveyor Trackable at a benchmark near their Connecticut home. Two runners up won \$100 Visa gift cards for their photo entries.

Celebrating surveying

On June 1, Robert Cizauskas was randomly selected from over 300 entries to receive the grand prize trip for two to the 2015 Geocaching Block Party in Seattle. Cizauskas and his family discovered geocaching in 2010 through a brief conversation about GPS with a hot air balloon pilot. The #PSnoboundaries hunt was their first search for an NGS marker.

In describing his experience, he said, “My family had never found a benchmark before, so we were excited about finding one and taking a picture. We noticed there was one on the Thomaston (Connecticut) Police Department, not far from our home. We activated our new trackable, attached a bicycle reflector (since we have seen surveyors use reflectors) and headed out.”

“This contest started with celebrating Surveyors Week, but it keeps going,” Norris said. “These trackables will keep sharing our message that surveying is a career without boundaries. Anyone can—and should—visit geocaching.com/ncees to see if one is nearby. And then get out there and find it.”

To see the photos taken with the NCEES Surveyor Trackables, open the hashtag #PSnoboundaries on Facebook and Twitter.

FROM THE PRESIDENT



DAVID WIDMER, P.L.S.
NCEES PRESIDENT

Filling in the unanswered questions

AS I WRITE MY FINAL *LICENSURE EXCHANGE* ARTICLE as president of NCEES, I can only think about a story that my pastor told a few weeks ago as he was leaving our church to pursue other adventures. He commented on how everybody always anxiously awaits the final sermon to hear the “zingers”—that tell-all sermon that fills in all the unanswered questions.

I also think about a conversation one evening with my wife and Western Zone Vice President Pat Tami, P.L.S., when Pat asked me what my legacy as president was going to be. His question took me by surprise and really made me think. My response to him was very simple: I want members of the Council to know that I did what I was elected to do, nothing more, and certainly nothing less.

When I took on the duties of president, I placed what seemed like a heavy topcoat on myself to fulfill all of the office’s duties to the best of my abilities. Certainly there were things I knew from my prior years of experience on the board of directors, but when it came to this year, I had the responsibility of setting the tone and agenda for the meetings. I also chose to disclose everything that I was made aware of as president to my fellow members of the board of directors. Please don’t think this is a negative comment about those that led the Council before me. To be accurate, I followed in the footsteps of some really special people (Dave Whitman, Joe Timms, Dale Jans, Gene Dinkins, and Patty Mamola), whom I have gotten to know and respect over the years, and I will always remember how they ran their meetings. But the one clear distinction is that I am not one of them; I am me, and I do things the way I see fit.

As a member of the board of directors, I had the fiduciary responsibility, just like my fellow board members, to ask the tough questions. It just seemed like as president, there were more unanswered questions in my mind than the previous five years I served on the board of directors. I am sure staff dreaded seeing an

As I prepare to turn the president’s gavel over to President-Elect Konzett at the annual meeting, I wish him every success as we continue to make this organization and our licensing process the gold standard.

email from me in their inbox this year because it normally included a request for clarification on an issue or expense.

So as I write my last article, let me tell you the zinger. ... NCEES is a truly amazing organization. I am proud to say that I have been involved with it since the early ’90s and that I am only the third professional surveyor to serve as its president since 1920.

To all members of the 70 licensing boards, I thank you for what you do for your jurisdiction as well as what you do for the Council. To all our exam volunteers, food and drink is not enough for your contributions. Without the volunteers, we would not be in the financial shape we are in today. To all the past presidents, thank you for what you have done because I know the commitment it takes to do this job, and in a few weeks I will join your ranks and be called David Who? And to my fellow board members, both past and current, it has truly been an honor to work with you as we made those tough decisions. I remember one of my very first board of director meetings when we voted to close the Miami office; it was a tough decision, but it was the correct decision. And, finally, to those members of staff who made my term go smoothly, your assistance and cooperation have been greatly appreciated, and I will always be grateful.

As I prepare to turn the president’s gavel over to President-Elect Konzett at the annual meeting, I wish him every success as we continue to make this organization and our licensing process the gold standard. Good luck, Mike.



WILLIAM PIERSON, PH.D., P.E.
COMMITTEE ON EDUCATION MEMBER

NCEES committees address CPC requirements

A PRIMARY OBJECTIVE OF NCEES IS TO FACILITATE professional mobility and promote uniformity of licensure processes. This is achieved in part through its *Model Law* and *Model Rules*. These documents reflect best practices as determined by the member boards and serve as models for state laws and regulations. The Committee on Education, along with the Committee on Member Board Administrators (MBA), has been working this year to improve uniformity in continuing education requirements. The committee looked to these model documents to find solutions.

Model Law Section 120.60 E states that boards “shall have the power and authority to require a demonstration of continuing professional competency of professional engineers and professional surveyors as a condition of renewal or relicensure.” In *Model Rules* Section 240.30, continuing professional competency (CPC) requirements are defined as the equivalent of 15 professional development hours (PDHs) per annual renewal cycle, with one of these PDHs focused on professional ethics or improving a licensee’s skills related to business practices or professional operations. In effect, Section 240.30 defines a de facto standard for CPC requirements: 15 PDHs per year with 1 PDH in the area of ethics or professional practice.

Since the establishment of these CPC requirements, licensing boards have generally accepted them. A review of current CPC requirements of the 56 U.S. engineering boards reveals the following:

- 31 require 15 PDHs per year
- 8 require 12 PDHs per year
- 6 require between 1 and 11 PDHs
- 11 require none

The numbers above are annual averages for the jurisdictions; some boards (36) are on a two-year renewal cycle, while the remaining jurisdictions are on one- or three-year renewal cycles. In these multiyear renewals, an applicant may get all of his or

her PDHs in the same calendar year as long as they are earned before that board’s renewal date. Furthermore, the majority of the jurisdictions have no requirements regarding ethics or state-specific laws.

Although there is a significant level of consistency in the number of PDHs required by member boards, there is little consistency in renewal dates. Again, reviewing the current requirements of the various engineering licensure boards reveals that

- 15 boards have a December 31 renewal date (some only in odd years, some only in even years, some alphabetically by last name)
- 8 have a June 30 renewal date
- 17 use other dates
- 16 have varying dates (for example, by last name or by date of licensure)

While engineering licensing boards are generally consistent in meeting the intent of CPC requirements as defined in the *Model Rules*, the administrative processes used to implement these requirements have significant differences. For those licensed in multiple jurisdictions, these administrative differences create barriers to mobility. This conclusion is supported by the results of the Committee on Education’s 2014 survey of NCEES Record holders. Out of nearly 7,000 respondents, 56 percent agreed or strongly agreed that differing renewal cycles are “major obstacles” to satisfying CPC requirements in multiple jurisdictions.

While most of the committee’s research has been focused on the engineering side, preliminary results indicate that the same renewal date obstacles and varying specific requirements are a hurdle for surveyors as well.

For the past two years, the Education Committee has been charged with finding ways to enhance mobility with respect to CPC requirements. In 2014–15, the committee worked with the MBA Committee to develop a plan for adoption of common CPC requirements. As a result of these deliberations, the MBA and

Education committees support the following proposal:

Should a jurisdiction adopt it, each licensee would have the option of satisfying either 1) the CPC requirements of that jurisdiction or 2) the NCEES Continuing Professional Competency Standard, which requires 15 PDHs minimum per calendar year (January 1—December 31), including

- A minimum of 1 ethics PDH per year
- Use of the NCEES CPC Registry to report CPC activities and upload of supporting documentation

The standard's use of the calendar year for reporting CPC activity would be applicable regardless of the jurisdiction's renewal period. This would resolve the complicated issue of "which month" a registrant must earn CPC credits for each particular jurisdiction,

while at the same time meeting (or exceeding) the intent of the CPC requirements of most jurisdictions. No carryover of PDHs from year to year would be allowed.

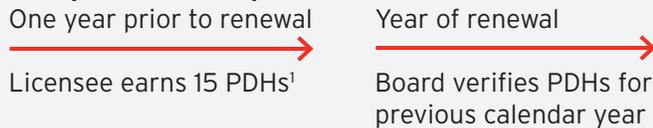
As stated previously, registrants opting to meet the requirements of the NCEES CPC Standard would have to use the NCEES CPC Registry, which is currently under development. Using the registry to track CPC credits will facilitate the auditing and approval process for boards adopting this proposal.

While questions may arise about administrative impacts on member boards, allowing licensees the choice to satisfy either the NCEES CPC Standard or a particular board's CPC requirements would undoubtedly enhance mobility and lessen the administrative burden for registrants who are licensed in multiple jurisdictions.

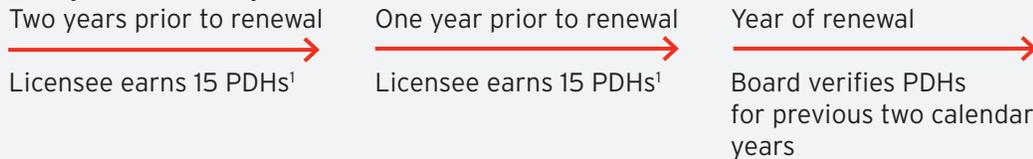
Time lines for CPC renewal cycles

The following time lines illustrate how boards and licensees adopting the NCEES CPC Standard would be applied for one-year, two-year, and three-year renewal periods.

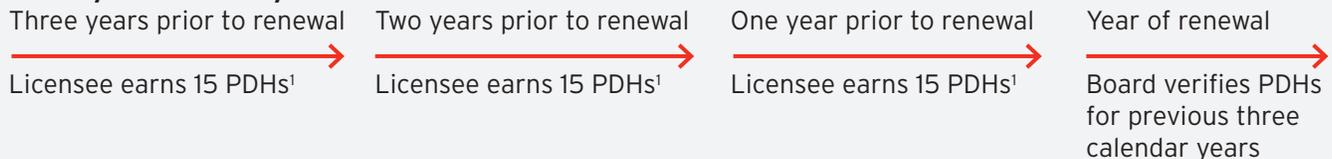
One-year renewal cycles



Two-year renewal cycles



Three-year renewal cycles



¹Includes 1 PDH of ethics

Officer nominees and incoming vice presidents discuss vision for NCEES

NCEES WILL ELECT A NEW PRESIDENT-elect and treasurer at its 2015 annual meeting, which will be held August 19–22. Nominees for president-elect rotate among the four NCEES geographical zones. The 2015–16 president-elect will be from the Southern Zone; the Committee on Nominations has submitted Daniel Turner, Ph.D., P.E., P.L.S., as its nominee. It also submitted Shelley Macy, P.E., and Gary Thompson, P.L.S., as nominees for the 2015–17 treasurer.

Two new vice presidents will join the 2014–15 board of directors, which will be installed at the banquet on August 21: Roy Shrewsbury, P.S., representing the Northeast Zone, and Theresa Hodge, P.E., representing the Southern Zone.



Nominee for President-Elect Daniel Turner, Ph.D., P.E., P.L.S., Emeritus Member of the Alabama State Board of Licensure for

Professional Engineers and Surveyors

NCEES Experience: Southern Zone Vice President (2013–15); Committee on Examination Audit Board Liaison (2014–15); Future of Surveying Task Force Board Liaison (2014–15); Committee on Member Board Administrators Board Liaison (2013–14); Committee on Examinations for Professional Engineers Member (2010–13)

Why do you want to serve as NCEES president-elect?

This position provides a wonderful opportunity to continue serving my profession. It continues my career goals of advocacy for engineering and surveying, of encouraging professionalism and ethical conduct among practitioners, and of underwriting the future of our profession in the classroom and in service to engineering professional organizations.

My professional outlook was shaped as an engineering student at the University of Alabama. My professors stressed engineering licensure and joining engineering societies after graduation. One of my professors expressed their philosophy well: “Turner, you are not studying to be an engineer. You are studying to be a professional. Be professional and act professional. When I am gone, someone must take care of our profession, and it might be you.” I took that message seriously.

What are the key issues or goals you want to focus on later as president?

Two issues rise to the surface. First, encourage more students to pursue licensure and retain more who begin the licensure process but do not finish it. An estimated 25 percent of students who pass the FE exam never return to take the PE exam. We need to find the reason they don’t come back, address it, and move them to licensure.

The second issue involves rapid changes to the surveying profession. Technology is bolting ahead with wonderful advantages,

but it is expensive and can displace practicing surveyors. Existing educational levels range from field training to graduate degrees. The number of candidates taking FS and PS exams has plummeted over the past six years. The Future of Surveying Task Force did a great job of assessing the situation and recommending actions, but the actions must be put into place, managed, and optimized for the good of the profession.

What longer-term issues do you think NCEES will need to address in the future?

The development of sophisticated technologies has produced subspecialties in engineering, altering or splitting current disciplines and creating new ones. This can require alterations to some existing exams and production of new discipline exams, often to very small populations of candidates. Preparing these exams takes more effort by a smaller volunteer pool, and sometimes there aren’t enough candidates to produce statistically significant parameters to assess item and exam quality.

A second, and potentially more difficult, challenge is the change in engineering and surveying students. They are more socially oriented and less accustomed to traditional “grind it out” engineering processes. Today’s students are likely to complete homework problems using information gathered through a search on their cell phones. NCEES has to look at licensure from a different perspective. Changes to the licensure process may or may not be necessary, but certainly new ways to communicate with students are needed.

Nominees for Treasurer



Shelley Macy, P.E., Member of the Wyoming Board of Registration for Professional Engineers and Professional Land Surveyors

NCEES Experience: Committee on Finances Member (2013–15)

Why have you chosen to run for treasurer?

Wyoming members have a long history of service at the national level. After my reappointment this spring, I decided it was time to become more involved myself. During my first term, which began in 2011, I spent time learning about the issues facing NCEES and the stances of different states and regions on these important topics. I have discovered that there is typically a long history of the development of discussion items—and one worth having a deeper understanding of in order to be an informed, useful member. At this time, I am ready, willing, and able to take on the responsibilities of the treasurer's office. I agree with NCEES' principles and would be honored to dedicate my time to this position.

How has your past experience prepared you for this office?

Personally, I have a diverse background that provides for a unique skill set for financial insight in analysis and review. As a rancher's daughter, I learned the value of personal integrity, forthrightness, and hard work. I used these qualities to earn a bachelor of science in mechanical engineering right out of high school. As I worked in consulting for commercial projects designing HVAC, plumbing, and fire protection systems, I found that I was uncomfortable providing financial advice to clients. So, I again turned to academia

and took business and accounting classes for nearly a decade at night while working full time, successfully becoming licensed as a professional engineer and having two children in the meantime. I applied these skills to provide better service to my clients by understanding their financial needs. In 2013, I earned a master of business administration from the University of Wyoming.

Professionally, I have spent most of my career in private practice. I spent two years working in state government and learning the regulatory role. I have owned and operated my own engineering firm since 2002. During this time, I have also developed property and manage a self-storage business with my husband. Mechanical design has evolved during my career, and I have adapted to utilizing new technology for improved control systems with the intent of improving the bottom line of clients. Depending upon their needs, private or public, long-term or short-term ownership, the financial approach to design recommendations changes. Given this background, I am comfortable taking on the role of treasurer for our nonprofit organization and understand the difference in accounting practices from profit businesses.

If elected, what issues or goals do you want to focus on?

My first goal is to be engaged, visible, and approachable. The budget is complex and when expanded the details are—and should be—daunting. I would work diligently to be transparent and useful to the board of directors to complete its fiduciary duties and responsibilities.

Second, I would strive to handle NCEES funds with high standards and a tone of integrity.

My next goal would be to recruit the next treasurer. With the diverse skills and talents

available in our organization, I believe this position should be rotating through different states, regions, backgrounds as well as surveyor and engineer.

Also, I would focus on being sensitive to change and aware of impacts as CBT data becomes real data instead of hypothetically projected behavior.



Gary Thompson, P.L.S., Emeritus Member of the North Carolina Board of Examiners for Engineers and Surveyors

NCEES Experience:

NCEES representative to ABET Applied Science Accreditation Commission (2015–present); Treasurer (2013–15); Committee on Finances Board Liaison (2013–15); Committee on Examination Audit Board Liaison (2013–14), Consultant (2009–13); Committee on Examination Policy and Procedures Chair (2011–13), Consultant (2009–11); Committee on Nominations Alternate (2010–12), Member (2006–09); Committee on Examinations for Professional Surveyors Chair (2009–11), Consultant (2008–09), Member (2005–08); Computer-Based Testing Task Force Consultant (2009–11); Surveying Exam Development Committee (2006–present)

Why did you decide to run for a second term as treasurer?

It is rewarding to take part in NCEES activities, and I want to continue to contribute to the organization's success.

The financial position of NCEES is strong. Due to outstanding leadership from the board of directors, members, and staff, the monetary reserves now exceed the amount required by our financial policy. As treasurer, I would work with the

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OFFICER Q&A

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appropriate committees to review the status of our reserves and assist in making recommendations on efficiently using them and maintaining appropriate reserves.

This year, the volume of candidates for the FE and FS exams is below budgeted levels. As treasurer, I would work with the staff and committees to adjust processes to increase the volume of CBT examinees and reduce the number of applicants who reschedule appointments multiple times.

As 2013–15 treasurer, I took an active role in revising the strategic plan. I fully support the items in the plan, and I would like to continue contributing to meeting our goals.

If elected, what issues or goals do you want to focus on?

The treasurer's primary role is oversight of financial operations of the budget. Providing exams is a major source of revenue for NCEES. As we move more exams to CBT, it is critical to monitor the volume of these examinees to ensure that we meet budgeted volumes. Modifying the CBT exam windows, which was approved in May by the NCEES board of directors, will allow us to offer CBT exams without breaks. I believe this change will increase the volume of FE and FS examinees and reduce the number of applicants who pay for an exam but fail to schedule it within a year.

NCEES is working with the Society of American Military Engineers to develop a partnership to promote licensure of engineering and surveying to members of the military when they complete their service. I am interested in this unique partnership to promote the value of licensure and assist veterans as they make the transition from military service.

I also support

- The transition to a paperless expense-reporting system for exam committee volunteers and committee members;
- Increased acceptance of Model Law Engineer/Surveyor by member boards; and
- Use of the NCEES continuing professional competency registry.

How has your past experience prepared you for this office?

Serving as treasurer, participating on NCEES committees, and taking part in the exam development process have helped me to develop knowledge and skills that will benefit me as treasurer.

Outside of NCEES, I have served as president of a state and national professional society. I am currently on the National Geospatial Advisory Committee and chair of the North Carolina Boundary Commission, which provides experience in working with multiple agencies in different jurisdictions and the public. I have developed financial management skills by developing and managing an agency budget for more than 20 years, and I have also managed numerous grants.

Incoming Northeast Zone Vice President



Roy Shrewsbury, P.S., Member of the West Virginia Board of Professional Surveyors

NCEES Experience: Advisory Committee on Council

Activities Member (2014–15); Committee on Nominations Member (2012–13)

Why did you choose to run for Northeast Zone vice president?

I was encouraged to run for Northeast Zone vice president by my colleagues, the board members with the West Virginia Board of Professional Surveyors, and also a number of NCEES colleagues. I have always enjoyed being involved with whatever organization I am working with, from the local chamber of commerce to NCEES and many civic and professional organizations in between. I am so honored to have been elected at our Northeast Zone meeting in Hershey, Pennsylvania. I want to be a part of the leadership team that provides choices to the entire Council so that we can make the best decisions for our member boards.

How has your past experience prepared you for this office?

I was privileged to have the opportunity to attend all of the zone and annual meetings since 2008 and served on various committees of the zone and NCEES. I have served as chairman of the West Virginia surveying board since 2010, and in 2014 our board hosted the Northeast Zone interim meeting at The Greenbrier. Working with our current zone vice president presented me with a good understanding of the requirements to stay within our budget but yet have a meaningful agenda and showcase our beautiful state of West Virginia.

What issues or goals do you want to focus on during your term?

Two areas are helping to address mobility issues by working to standardize continuing professional competency requirements and promoting the conversion of the PS examination to CBT in 2016. I would like to see a plan developed for a portion of the reserve funds to be utilized to assist member boards to ensure that all boards

can participate in NCEES activities. Another issue facing the engineering and surveying professions is the definition of engineering surveys. I know this has been discussed many times in the past, but the surveying community as a whole does not feel it has been technically dealt with to the satisfaction of both communities.

What longer-term issues do you think NCEES will need to address in the future?

Ensuring the financial stability of NCEES is certainly a primary goal of the organization. We need to continue to advance NCEES in promoting licensure. Speaking of licensure, NCEES needs to address how to stop the decline of exam applicants in both engineering and surveying. From 2007–08 to 2014–15, the FE exam volume dropped by some 8,000 applicants, a decline of 17 percent. During the same time period, the FS exam volume dropped by about 2,000 applicants, or 70 percent. Admittedly, a drop following the transition to computer-based testing in January 2014 was expected, but we must address it, return numbers to previous levels, and then increase the numbers. The decline is alarming, and NCEES needs to continue to develop a long-range plan to attract our future candidates to work in the fields of engineering and surveying.

Incoming Southern Zone Vice President



Theresa Hodge, P.E., Member of the South Carolina Board of Registration for Professional Engineers and Surveyors

NCEES Experience:

Southern Zone Interim Meeting Host Board Chair (2014); Committee on Law Enforcement Chair (2012–14); Southern Zone Secretary-Treasurer (2010–12); Committee on Uniform Procedures and Legislative Guidelines Member (2009–12)

Why did you choose to run for Southern Zone vice president?

The answer is quite simple: to make a difference. We all tend to get into a routine—how we plan things, how we make our choices, how we think engineers should be. Not that anything is wrong with this, but I think that Past President Patty Mamola's focus on encouraging diversity was huge, an all-encompassing statement. We're not talking about quotas but true diversity.

How has your past experience prepared you for this office?

My experience with NCEES has allowed me to better understand the organization and to work with other NCEES members.

Being Southern Zone secretary-treasurer gave me insight into zone procedures and knowledge of each respective officer position. It also got me out of my comfort zone, as I was early in my term, and I was able to meet and become friends with our Southern Zone family.

Serving on the UPLG Committee allowed me to further branch out to NCEES as a whole. This is a very challenging committee; however, it was very rewarding because it required me to understand the *Model Law* and *Model Rules*. I would recommend serving on this committee to all members.

Working with the Law Enforcement Committee was an eye opener. While law enforcement is something that we, as board members, all know about, in serving as chair, I gained a fuller appreciation of the challenges and frustrations of member board administrators and investigators.

Serving as chair for planning the 2014 Southern Zone interim meeting in Charleston, South Carolina, provided me planning knowledge coupled with experience dealing with budget constraints to properly plan an event. It also brought

me closer to fellow Southern Zone members.

All of these positions have shaped my growth while serving NCEES.

What issues or goals do you want to focus on during your term?

I would like to accomplish or set the framework for the following:

- New member mentorship and activities on committees. We can get people involved early by allowing them to take on challenges and not to be influenced by the past.
- Passing the baton, which is so critical in today's world. People leave positions without the transfer of knowledge to new members, hence a starting-again process.

What longer-term issues do you think NCEES will need to address in the future?

While I realize that there may be other long-term issues for NCEES, such as promoting engineering and surveying, comity (both nationally and internationally), and computer-based testing, we also need to focus internally within NCEES for fresh ideas.

ENFORCEMENT BEAT



JOHN GREENHALGE
COMMITTEE ON LAW ENFORCEMENT CHAIR

Law Enforcement Committee to present best practices for law enforcement and investigations at annual meeting

OVER THE PAST SEVERAL YEARS, WE HAVE SEEN AN increase in attendance at the annual meeting Law Enforcement Forum and Law Enforcement Program by member board administrators and members. We also have received feedback that schedule conflicts, such as Friday's business session, have kept others from attending. Based on these comments, the Committee on Law Enforcement approached the Committee on Member Board Administrators (MBA) to see if there would be interest in an annual meeting workshop covering the best practices for law enforcement and investigations.

MBA professional development

The Law Enforcement Committee will present this MBA professional development workshop Wednesday, August 19. The committee has worked hard to develop a comprehensive and informative program. This presentation will be tailored toward board administrators and members, as well as enforcement staff, and will be based on the NCEES *Investigation and Enforcement Guidelines* and the *Investigative Training Manual*.

The workshop will focus on helping member boards learn from the law enforcement and investigative practices developed over the years by the NCEES Committee on Law Enforcement and other member boards. The presentation will also offer an opportunity for questions and answers from board enforcement staff as well as an overview of the investigative tools available from NCEES to member boards.

The intent of this seminar is not to replace the Law Enforcement Forum and Law Enforcement Program but rather to present a broader view of law enforcement and investigative practices in response to feedback from board administrators and members.

Traditional law enforcement offerings

The Committee on Law Enforcement will also hold the Law Enforcement Forum on Friday and Law Enforcement Program

The workshop will focus on helping member boards learn from the law enforcement and investigative practices developed over the years by the NCEES Committee on Law Enforcement and other member boards.

on Saturday. The content will be different from Wednesday's MBA workshop, so board members and administrators are encouraged to attend as well. After all, they are an important part of the enforcement team. Their level of involvement in investigations may vary by board, but they are the decision makers and set policies and procedures.

Friday afternoon's Law Enforcement Forum will include a presentation and discussion of legal cases that impact member boards. This will be followed by a round-table discussion of enforcement topics, including

- The roles of engineers and architects
- Enforcement issues related to certificates of authorization
- Resolving complaints without formal hearings
- Application requirements of member boards

Saturday's Law Enforcement Program will be presented in three parts. It will open with a presentation on developing an investigation case from beginning to end. Members of the NCEES Committee on Law Enforcement and the NCEES law enforcement community will provide training on developing an investigation from the initial complaint through final disposition.

Part 2 of will focus on developing proactive enforcement programs and programs to educate licensees and non-licensees on the registration act and to improve understanding of the laws and rules governing the practice of engineering and surveying, resulting in fewer disciplinary actions.

The Law Enforcement Program will conclude with an overview of the NCEES Enforcement Exchange and upcoming changes to the database as well as a discussion of the investigative tools available to member boards.

I encourage anyone who wants to learn more about the enforcement and investigative process and the best practices to ensure a sound enforcement program to attend Wednesday's workshop, the Law Enforcement Forum, and the Law Enforcement Program.

FEATURE STORY

continued from cover

"It's never too early to get 'real' and interact with professional engineers and the public. When students complete these types of projects, they are forced out of their comfort zones and have to develop and use skills that an engineer needs," said NCEES Engineering Award jury chair Michelle Roddenberry, Ph.D., P.E. "Being part of an open-ended challenge, under the direction of mentor engineers and faculty, is a great way to transition from textbook problems to messy, challenging ones that aren't as clearly defined and take teamwork to solve."

A jury of NCEES members and representatives from academic institutions and professional engineering organizations selected the winners. The 11 jury members considered criteria such as

- Successful collaboration of faculty, students, and licensed professional engineers
- Protection of public health, safety, and/or welfare of the public
- Multidiscipline and/or allied profession participation
- Knowledge or skills gained
- Effectiveness of display board, abstract, and project description

Law Enforcement workshops and forums at the 2015 NCEES annual meeting

MBA Professional Development

Wednesday, August 19 | 8:00-11:30 a.m.

- Discovering best practices for law enforcement and investigations

Law Enforcement Forum

Friday, August 21 | 1:30-4:30 p.m.

- Discussing legal issues and enforcement topics

Law Enforcement Program

Saturday, August 22

Part 1 9:00 a.m.-Noon

- Developing an investigation

Part 2 1:00-3:00 p.m.

- Building proactive enforcement programs

Part 3 3:00-4:00 p.m.

- Exploring NCEES investigation tools



Jurors review the entries for the 2015 NCEES Engineering Award competition. Thirty-one entries from a variety of engineering disciplines competed for six awards.

Marquette University will be honored at the upcoming NCEES annual meeting. Representatives from the winning project will receive the award on behalf of the university's Department of Civil, Construction, and Environmental Engineering at a luncheon on August 21.

NCEES is currently preparing for the 2016 award cycle, and entry information will be available in September. The 2015 NCEES Engineering Award Book will also be released this fall. Profiles of the winning submissions are available online at ncees.org/award.

NCEES announces members of Emerging Engineers and Surveyors Group

NCEES IS PLEASED TO ANNOUNCE THE MEMBERS OF THE 2015–16 Emerging Engineers and Surveyors Group. The new task force will connect young engineers and surveyors with NCEES decision makers to provide feedback on topics concerning the licensure process and discuss topics relevant to the future of the engineering and surveying professions.

The members selected to serve on the group are as follows:

- Sarah Alghareeb, engineering student, University of Colorado, Boulder
- Ricardo Augustin, E.I.T., Florida
- Jay Baumgartner, P.E., Minnesota
- Zac Canody, P.E., Virginia
- Barton Ching, P.E., California
- Renee Daniel, E.I.T., Pennsylvania
- Jacob Heck, S.I.T., Ohio
- Trevor Jensen, S.I.T., Utah
- Bradley Roberts, P.S., Louisiana
- Alice Rystov, engineering student, University of California, Davis
- Katherine Sotolongo, P.E., Louisiana
- Christine Thornton, P.E., New York

“The paths to licensure for engineers and surveyors have changed considerably in the last century,” NCEES President David Widmer, P.L.S., said. “NCEES and its member licensing boards continuously work to improve the process. This group is part of those efforts.”

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Beginning with a focus group at the NCEES annual meeting in August, this group of young engineers and surveyors will work with leaders of NCEES and its member licensing boards to shape the future of the engineering and surveying professions and the licensure process.

“We look forward to working with the group at the beginning of the annual meeting. Some of them are able to stay for the rest of the meeting, so I encourage the member board members and staff at the meeting to welcome them,” Widmer said. “Answer their questions, and ask some of your own. There’s a lot to learn all around.”

HEADQUARTERS UPDATE



JERRY CARTER
NCEES CHIEF EXECUTIVE OFFICER

Change is inevitable—and necessary

I HATE CHANGE. SOME WOULD SAY THAT IS A PRODUCT of getting older, but I have always loved my routines—the comfortable feeling of thinking I know what’s coming next and have all the answers. I have come to realize that in order to grow, to make things better and to keep evolving, change is inescapable.

In recent years, change has been necessary for NCEES to adapt to various issues. These include the expanding body of knowledge in both the engineering and surveying professions, new methodologies for testing for minimum competence, continued interest by foreign entities in offering the NCEES exams, changes in education requirements for both professions, and the emphasis on sustainability for all new designs.

NCEES, as constituted by 55 individual jurisdictions and 70 member boards, is complex at a fairly high level. As we know, there are many similarities among the member boards, but even slight differences can have a great impact on both initial licensure and licensure by comity. These unique state requirements are often not member-board driven but rather the result of a legislative or departmental mandate. However, this is not a suitable explanation when needed change will bring greater efficiency to the licensure process, which will ultimately better protect the public.

NCEES is pursuing a number of routes to bring greater uniformity to the licensure process and fulfill the primary mission of this organization since its inception in 1920: mobility of the professional license.

One of the more significant problems that we hear about nearly every day is the varying continuing professional competency (CPC) requirements among member boards. I have heard of several instances of consulting engineers who are licensed in multiple jurisdictions hiring an administrative assistant to keep up with the plethora of paperwork and renewal dates required to maintain their licenses. The Committee on Education has

Change is how we adapt and make our systems and processes work better.

dedicated much of its effort this past year to develop a plan to bring greater consistency to the process while ensuring that licensees are completing continuing education activities that maintain or enhance their professional competence (see page 4 for more information on the committee’s work). At the NCEES annual meeting, the committee will recommend that member boards allow licensees to either meet the CPC requirements of that jurisdiction or the NCEES CPC Standard. The Committee on Member Board Administrators has endorsed this recommendation because it offers greater flexibility to both the member board and licensees.

NCEES is also pursuing reform in engineering education. At last year’s annual meeting, the additional education requirement for engineering licensure, set to take effect in the *Model Law* and *Model Rules* in 2020, was removed due to concerns that no member board had yet adopted the language and that engineering students were confused about what the exact requirements for licensure would be in the future. The Council voted to move the language to a position statement to affirm its commitment to reform in engineering education while working out the specifics.

Engineers and surveyors today have greater technology at their fingertips and greater challenges in terms of complexity and the breadth of knowledge required to practice, which must be addressed by our academic programs. NCEES will continue to lead in this effort to promote transformation in our educational institutions to address the continued evolution of the engineering and surveying professions.

Change is how we adapt and make our systems and processes work better. I have to admit, it’s hard to hate that.

Cottinghams establish endowed professorship

NCEES PAST PRESIDENT RICHARD COTTINGHAM, P.E., and his wife, Nancy, have pledged \$500,000 to establish the J. Richard and Nancy W. Cottingham Distinguished Professor of Civil Engineering Endowment at Clemson University in South Carolina.

The couple has long been committed to advancing licensure. Richard and Nancy Cottingham served on the North Carolina and South Carolina boards, respectively, and he is a past president of NCEES. In 2014, Richard Cottingham received the NCEES Distinguished Service Award with Special Commendation for his dedicated service to the engineering and surveying professions—the highest award given by NCEES.

The endowment will support a distinguished professorship in the Glenn Department of Civil Engineering. The recipient must be a professional engineer. Promotion of licensure among students and faculty in the college of engineering and science will be one of the primary objectives for the position, with the aim of enriching the student process for professional engineering development and licensure and helping to meet the engineering challenges of the future.



“In my career, I have personally experienced the value of licensure as a professional engineer and am committed to encouraging other Clemson alumni, students, and faculty to pursue licensure,” Richard Cottingham said.

From the May 4, 2015, Clemson University media release

NCEES zones honor distinguished service

AT THEIR SPRING INTERIM MEETINGS, NCEES ZONES recognized several individuals for long-standing service to the organization and the engineering and surveying professions.

The 2015 NCEES Zone Distinguished Service Award winners are

- **Central Zone:** Roger Helgoth, P.E., member of the Nebraska engineering board
- **Northeast Zone:** Roy Shrewsbury, P.S., member of the West Virginia surveying board

- **Southern Zone:** Pamela Nobles, P.S.M., emeritus member of the Florida surveying board
- **Western Zone:** Von Hill, P.S., emeritus member of the Utah board, and Patty Mamola, P.E., member of the Nevada board

The Central and Northeast zones presented their Distinguished Service awards at their joint interim meeting in Hershey, Pennsylvania, which was held April 30–May 2. The Southern and Western zones presented their awards at their joint meeting in Scottsdale, Arizona, held May 14–16.

MEMBER BOARD NEWS

ALABAMA Randall Whorton is a new appointee. Earl Foust is no longer a member.

ARIZONA Neal Jones is a new appointee. Erick Weiland and Douglas Whitneybell are no longer members.

FLORIDA PE Kevin Fleming, Elizabeth Howard, and Babu Vargese are new appointees. Lawrence Harris is the new board counsel.

HAWAII Member Craig Murayama passed away in January 2015. Alan Inaba, Ron Iwamoto, Joyce Noe, and Marc Ventura are new appointees. Jay Manzano, Paul Murray, and Roberto Yumol are no longer members.

LOUISIANA Thomas Carroll and Wilfred Fontenot are new appointees. Ernie Gammon and Ali Mustapha are no longer members. Emeritus member Richard Savoie is now the board's deputy executive director.

MASSACHUSETTS Clinton Dick is the new board administrator, replacing Erin LeBel.

MINNESOTA Robin Mathews and Keith Rapp are new appointees. Lisa Hanni and Bruce Johnson are no longer members.

NORTH CAROLINA Jonathan Care is a new appointee.

TENNESSEE PE Ellery Richardson is the new board attorney, replacing Robert Herndon.

VIRGIN ISLANDS Devin Carrington is a new appointee.

UPCOMING EVENTS

August 6-8

SE Exam Meeting
Clemson, South Carolina

August 18

2014-15 Board of Directors Meeting
Williamsburg, Virginia

August 19-22

NCEES Annual Meeting
Williamsburg, Virginia

August 22

2015-16 Board of Directors
Informational Meeting
Williamsburg, Virginia

September 11-13

PE Electrical and Computer
Exam Specifications Meeting
Denver, Colorado

September 17-19

PE Mechanical Exam Meeting
Clemson, South Carolina

September 18-19

PE Environmental Exam Meeting
Clemson, South Carolina

September 25-26

PE Civil Exam Meeting
Clemson, South Carolina

September 29-October 1

PE Petroleum Exam Meeting
Houston, Texas

David H. Widmer, P.L.S.
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Pennsylvania

Patty L. Mamola, P.E.
Past President
Nevada

Michael J. Conzett, P.E.
President-Elect
Nebraska

Gary W. Thompson, P.L.S.
Treasurer
North Carolina

Christy K. VanBuskirk, P.E.
Central Zone Vice President
Iowa

James J. Purcell, P.E.
Northeast Zone Vice President
New Jersey

Daniel S. Turner, Ph.D., P.E., P.L.S.
Southern Zone Vice President
Alabama

Patrick J. Tami, P.L.S.
Western Zone Vice President
California

Jerry T. Carter
Chief Executive Officer
South Carolina



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NCEES app returns to help users navigate annual meeting

The mobile app for the NCEES annual meeting is back. Introduced last year, the NCEES annual meeting app will again be available to help attendees get the most out of the 2015 event. Features of the app include

- The full event schedule
- Map of the meeting rooms
- Session enhancements, including the ability to set reminders and take notes
- Detailed information about speakers
- Links to the NCEES Facebook, Twitter, YouTube, and LinkedIn pages
- The ability to build a profile and easily share contact information with other app users

To download and install the app, go to ncees.org/mobile from a mobile device. Or download the app directly from iTunes or Google Play by searching for “NCEES meetings.”

All registered annual meeting attendees will receive an email with download and login instructions during the week of August 10.