

AELS Board Meeting - Day 2 - November 13, 2020

Nov 13, 2020 8:30 AM - Nov 13, 2020 5:00 PM AKST

Table of Contents

1. 8:30 am - Reconvene Meeting/Roll Call.....	2
2. 8:35 am - Application Review - Special Requests.....	3
3. 10:00 am - National Organization Reports and Updates.....	3
A. CLARB.....	3
B. NCARB.....	14
i. Remote Testing.....	42
C. NCEES.....	55
i. UAF Fairbanks Testing Center - Pearson VUE.....	113
4. 10:30 am - Old Business.....	118
A. Continuing Education Audits - Guidance.....	118
B. Rimkus COA - DOL Response.....	130
C. Committees.....	140
i. Investigative Advisory Committee.....	141
ii. Licensure Mobility.....	141
iii. Guidance Manual.....	141
iv. Legislative Liaison.....	174
v. Emeritus Status.....	174
vi. Budget Committee.....	174
vii. Continuing Education.....	174
D. To-Do List.....	174
5. 11:15 am - New Business.....	174
A. CE Exemption Request.....	174
i. Kean.....	174
6. 12:00 pm - Lunch.....	175
7. 1:00 pm - Reconvene/Roll Call.....	175
8. 1:05 pm - Statute and Regulation Working Session.....	176
A. SE by Comity Regulations.....	187
B. Working Draft.....	193
9. 4:45 pm - Read Applications Into the Record.....	215
10. 4:50 pm - Board Member Comments.....	215
11. 5:00 pm - Adjourn Meeting.....	215

State Board of Registration for Architects, Engineers, and Land Surveyors

	Appointed	Reappointed	Expires
Jennifer Anderson <i>Civil Engineer</i>	03/01/2018		03/01/2022
Robert (Bob) Bell <i>Land Surveyor</i>	03/01/2020		03/01/2024
Catherine Fritz - Secretary <i>Architect</i>	03/01/2016	03/01/2020	03/01/2024
Jeff Garness <i>Engineer Other Than Those Listed</i>	03/01/2020		03/01/2024
Elizabeth Johnston – Vice-Chair <i>Electrical/Mechanical Engineer</i>	03/01/2017		03/01/2021
John Kerr – Chair <i>Land Surveyor</i>	03/01/2013	03/01/2017	03/01/2021
Jeff Koonce <i>Architect</i>	03/01/2013	03/01/2017	03/01/2021
Loren Leman <i>Civil Engineer</i>	03/01/2020		03/01/2024
Luanne Urfer <i>Landscape Architect</i>	07/01/2013	07/07/2017	03/01/2021
Fred Wallis <i>Mining Engineer</i>	03/01/2016	03/01/2020	03/01/2024
Vacant <i>Public Member</i>			03/01/2022



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COVID-19 UPDATES

UPDATE OCTOBER 5, 2020:

Registration for the December L.A.R.E. administration is now open! The ongoing impact of COVID-19 continues to affect capacity allowances at test centers across North America and all candidates are encouraged to follow their local guidelines in order to stay healthy and safe.

The December L.A.R.E. administration dates are: November 30 - December 12.

Additionally, CLARB is excited to offer remote proctoring as an additional testing option for all section 1 and section 2 L.A.R.E. candidates beginning with the December 2020 administration. For more information, visit the [remote proctor information webpage](#).

UPDATE JULY 21, 2020:

We are aware that some candidates are receiving notices from Pearson VUE to reschedule their exam appointments for the August administration. This is due to COVID-19 restrictions on a local level as the pandemic continues to affect test center operations at both traditional and [third-party](#) test centers. We encourage you to follow any instructions Pearson VUE sends for your specific exam appointment and [contact CLARB](#) if you have any difficulty rescheduling your exam. We apologize for the inconvenience this may cause. We look forward to continuing to work with you on your path to licensure.

From: [Moden, Rebecca](#)
To: [Powers, Rebecca J \(CED\)](#)
Subject: December L.A.R.E. Administration Updates
Date: Friday, October 23, 2020 10:32:14 AM

Click [here](#) if you are having trouble viewing this message.



Following the announcements of revisions to the L.A.R.E. Candidate Agreement and updates to the L.A.R.E. Orientation Guide, we wanted to share some additional information related to the roll-out of these changes. The announcements below, also sent to candidates, explain the changes made and where they are located.

CLARB has been working with an attorney who specializes in certification and licensure testing to review our policies and procedures to ensure that we have the best protections in place for the exam program. We followed their advice to enhance and clarify our procedures so that candidates taking the exam clearly understand everything for which they are required to confirm agreement.

The type of agreement L.A.R.E. candidates sign, and the revised language included, is a standard requirement in high-stakes licensure programs. Additionally, updates to the Orientation Guide specifically include information related to remote proctoring.

Please don't hesitate to reach out if you have questions related to these updates. We want to make sure both you and your exam candidates are fully informed.

ANNOUNCEMENT - L.A.R.E. Candidate Agreement has been revised!

The L.A.R.E. Candidate Agreement has been revised. All candidates registering for an L.A.R.E. section will be required affirm that they have thoroughly read and understand the Agreement in full. Because this has been revised since the previous L.A.R.E. administration where candidates have read and agreed to the content, it is important for all candidates to be aware of this updated Agreement and thoroughly review it as it remains a required part of the registration and exam check-in process for all sections.

The full L.A.R.E. Candidate Agreement is available for review prior to registering in CLARB's L.A.R.E. Orientation Guide.

ANNOUNCEMENT - Orientation Guide has been updated!

The [Orientation Guide](#) has been updated with noted changes effective 10/1/2020. The updated sections include: Validity of Scores (page 20), L.A.R.E. Candidate Agreement (page 21), Violations and

Investigations (page 27-28), When and Where the Exam is Administered (page 5), and FAQ (page 34-36).

The Orientation Guide remains the only detailed resource provided by CLARB to prepare for the L.A.R.E. The updated Orientation Guide is available by [clicking here](#).



Council of Landscape Architectural Registration Boards (CLARB)

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From: [Meadows, Veronica](#)
To: [Powers, Rebecca J \(CED\)](#)
Subject: Rethink Regulation Updates Enclosed!
Date: Thursday, October 29, 2020 1:11:14 PM

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Rethink Regulation Project Updates

We have kicked off another fiscal year at CLARB working to support you and the continued regulation of landscape architecture across North America. You are likely already aware of our Rethink Regulation work, but we'd like to take a moment to share updates and exciting next steps on each of the three workstreams associated with this critical project.

POLICY - UNIFORM STANDARD

The policy workstream is focused on developing defensible requirements for licensure to result in a uniform standard which can be used across all jurisdictions.

Project update: Taking the political environment into consideration, we are working to complete our recommendation (based on research) for a uniform standard this fiscal year. Through this work, we will update CLARB's Model Law which will be subject to a membership vote in 2021.

Get involved! We are currently seeking volunteers interested in offering their time to assist in developing the uniform standard. This volunteer work will kick off in the spring and if you're interested, please reach out to [Andrea Elkin](#).

PROCEDURE - TIME TO LICENSURE

The procedure workstream focuses on identifying, researching, and supporting the implementation of changes which will reduce friction in the licensure process and reduce the time to licensure for the average candidate.

We are excited to announce that, as of October 1, our member board in Virginia has implemented a change which removed the pre-approval requirement for exam candidates! After working with our Rethink Regulation team, Virginia was able to make an administrative change to implement this process change. Because of their effort, candidates in Virginia who have an accredited degree can now directly register for the L.A.R.E. Please join us in congratulating Virginia as we all seek ways to advance a friction-free licensure process.

The program to evaluate processes and reduce friction is continuing in the jurisdictions which have previously offered their partnership: Oregon, Maryland, and Texas. To hear their work updates in their own words, [click here](#) to view the regional meeting recording (scroll to minute 28:00).

Get involved! Does this work sound like something your board would be interested in doing too? We are seeking interested member boards to partner with in FY2021! Email [Andrea Elkin](#) by November 30 if your board is interested in conducting an analysis to reduce unnecessary friction in the licensure process, reduce the time to licensure, and increase candidate satisfaction with the process. We're excited to get started!

PROCESS - UNIFORM APPLICATION

The process workstream focuses on developing a uniform application for licensure which can be accepted by all jurisdictions to reduce redundancies in the documentation required.

CLARB's August regional meetings focused on advancing this project and we sincerely thank all who participated and shared feedback related to the uniform application prototype. Following the addition of your input, we made final recommended changes to the application and are now equipped to begin making updates to CLARB's processes over the coming months. In our first iteration, CLARB will develop an updated Council Record which will be available in early 2021. To view the updated uniform application, please [click here](#).



From: [Druga, Zachary](#)
To: [Powers, Rebecca J \(CED\)](#)
Subject: Watching: H.R. 8680 - Occupational Licensing Board Antitrust Damages Relief Act
Date: Tuesday, November 3, 2020 12:09:59 PM

Click [here](#) if you are having trouble viewing this message.



What To Watch: Federal Legislation to Provide Antitrust Immunity to State Occupational Licensing Boards

A bipartisan bill (H.R. 8680), supported by CLARB, was introduced by U.S. Representatives Jamie Raskin (D-MD-08), David Cicilline (D-RI-01) and Mike Conaway (R-TX-11) and referred to the House Committee on the Judiciary. This bill, if passed, would protect individual members of state licensing boards from being sued for board actions.

Details of the bill can be found in [this press release](#) from Representative Raskin's office. To follow the bill's status and read the full text, please [click here](#).

If passed, new members of licensure boards and any members still serving on or working for a licensure board at the time of enactment, would be immune from personal and financial liability for work done in their official capacity of the board. Any of our U.S. members serving on a landscape architect or multidisciplinary board would meet the provisions required for immunity under this act as long as they are acting in their official and appropriate capacity. This will also allow the public and experienced professionals to serve on licensing boards and provide their expertise to protect the health, safety, and welfare of the public while not jeopardizing their own livelihood.

Bill summary: The bill provides for the immunity from liability for damages for an occupational licensing board, or any member, officer, employee, or agent of such board for actions taken in official capacity of the board that are in line with appropriate conduct by the board. It also establishes requirements for immunity under this act. These require a state to: have in effect a law that requires a license to engage in the occupation; specifies qualifications to obtain licensure; require a licensee to adhere to professional and ethical standards; members are appointed by government officials; there is public member representation; and there are mechanisms in place for licensees to contest an adverse action by the board and get the ability to defend themselves and receive an impartial adjudicator (i.e. a court).

The legislation is supported by the following organizations: American Institute of CPAs, American Physical Therapy Association, American Psychological Association, American Veterinary Medical Association, Association of State and Provincial Psychology Boards, Council of Landscape Architectural

Registration Boards, Federation of Podiatric Medical Boards, Federation of State Boards of Physical Therapy, Federation of State Medical Boards, National Association of State Boards of Accountancy, National Athletic Trainers' Association Board of Certification, Inc., and National Board for Certification in Occupational Therapy, Inc. Our co-signed letter of support is [available here](#).

As updates to this bill are available, we will continue to share information related to this important opportunity for our regulatory community.



Council of Landscape Architectural Registration Boards (CLARB)

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L.A.R.E. Remote Proctor Information *(NEW - December 2020 Administration)*

CLARB is excited to offer remote proctoring as an additional testing option for all section 1 and section 2 L.A.R.E. candidates beginning with the December 2020 administration.

For sections 1 and 2, if you choose, you can now access the exam without having to visit an in-person test center within the appointment schedule offered. A live proctor will monitor your exam(s) through a video feed using advanced security protocols.

The registration process for the L.A.R.E. remains unchanged- you will still **register** for the L.A.R.E. through CLARB's website and then schedule your appointment (in-person test center or home/office) via Pearson VUE's **website**. Remote proctored exams will be conducted through Pearson VUE's OnVUE platform.

There are important differences to note between remote proctored and in-person test options:

- Only sections 1 and 2 are offered through remote-proctored OnVUE testing. Remote proctoring is an option provided but you may always choose the option of testing in a traditional test center.
- Sections 3 and 4 must be scheduled at a traditional test center.
- Remote proctoring for sections 1 and 2 is available in all jurisdictions where the L.A.R.E. is administered.
- If choosing remote proctoring, you will need to test your computer settings prior to your test date to ensure the exam and security protocols can be administered.
- Due to security protocols, any candidate testing via remote proctor will **not** be permitted to take a break once the test begins. (Breaks are still permitted in traditional test centers.)

- Any candidates requiring special accommodations will need to schedule their exam(s) at a traditional test center regardless of section.
- Physical scratch paper and white boards are not permitted during remote proctored exams. An electronic white board is available for use within the OnVUE exam platform.
- Personal calculators are not permitted. A calculator will be provided within the OnVUE exam platform.
- In light of ongoing impacts of COVID-19, remote testing offers an ability to take sections 1 or 2 without unexpected test center disruptions, closures, or reduced capacity measures due to social distancing requirements.

CLARB has prioritized remote proctoring to create a more accessible solution for candidates to be able to take/write certain sections of the L.A.R.E.

We are excited to offer you this opportunity and are available to answer any questions you may have. Please contact CLARB at info@clarb.org or 571-432-0332 Monday-Friday 9am-5pm EDT.

FAQ: Remote Proctoring the L.A.R.E.

What is remote proctoring? ▲

Beginning with the December 2020 L.A.R.E. administration, remote proctoring is an exciting additional testing option for candidates who choose to access the exam without having to visit an in-person test center.

CLARB has partnered with Pearson VUE's OnVue platform to allow candidates to register and take/write sections 1 and 2 of the L.A.R.E. from their own home or office using their own computer. A live proctor will monitor candidates' exams through a video feed using advanced security protocols which are thoroughly explained to candidates in the registration and check-in processes.

Only sections 1 and 2 are offered through remote proctoring. Remote proctoring is an option provided but candidates may always choose the option of testing in a traditional test center.

Sections 3 and 4 must be scheduled at an in-person, traditional test center.



Who qualifies for remote proctoring?

Any candidate registering for section 1 and/or 2 of the L.A.R.E. in any jurisdiction where the exam is administered will qualify for the remote proctoring option.

When can I test? ▲

Candidates who choose remote proctoring for their exam can schedule their appointment at any time, day or night, during the exam administration period. [Click here](#) to view upcoming exam dates.

We recommend selecting a day and time when internet bandwidth is less taxed so there is less chance of interruption to your exam. If you lose your internet connection, you **may** not be permitted to continue the exam.

I registered and scheduled an in-person appointment, can I switch to remote proctoring? ▲

Yes, you can switch your scheduled exam appointment from a traditional test center appointment to remote proctor and vice versa. If you have already scheduled your appointment for sections 1 and/or 2 (remember, sections 3 and 4 must be scheduled at a traditional test center!) you may change your appointment by visiting the Pearson VUE [scheduling page](#), canceling your original appointment, and selecting "at a home or office" to reschedule via remote proctoring.

What are the biggest differences in the test experiences between a traditional test center and a remote-proctored exam? ▲

In a remote-proctored setting, you will have the opportunity to take/write the exam at any time, from the comfort of your own home setting using computer equipment you are already familiar with.

Using advanced ID verification and security protocols, a live remote proctor will be monitoring your exam progress. At a test center, proctors also monitor the security of the building but through a remote setting, remote proctors will only be able to see your testing environment and monitor your experience via the web camera.

- Only sections 1 and 2 are offered through remote proctoring. Remote proctoring is an option provided but you may always choose the option of testing in a traditional test center.
- Sections 3 and 4 must be scheduled at a traditional test center.
- Remote proctoring for sections 1 and 2 is available in all jurisdictions where the L.A.R.E. is administered.
- If registering for remote proctoring, you will need to test your computer settings prior to your test date to ensure the exam and security protocols can be administered.
- Due to security protocols, any candidate testing via remote proctor will not be permitted to take a break once the test begins. (Breaks are still permitted in traditional test centers.)
- Any candidates requiring special accommodations will need to schedule their exam(s) at a traditional test center regardless of section.

I have been approved for special accommodations; do I qualify for remote proctoring? ▲

At this time, any candidates who require special accommodations will need to schedule their exam appointment at a traditional test center.

I have more questions, who can I contact? ▲

CLARB is excited to offer you this opportunity beginning with the December 2020 L.A.R.E. administration. We are available Monday-Friday 9 a.m.-5 p.m. ET to answer any questions you may have. You may contact us at info@clarb.org or 571-432-0332.

Council of Landscape Architectural Registration Boards

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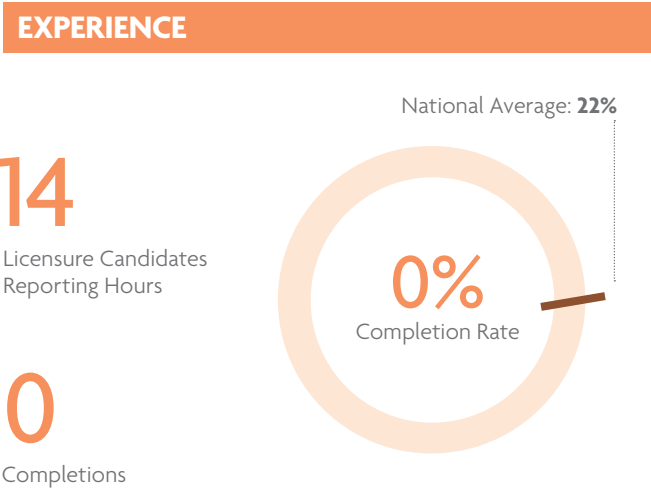
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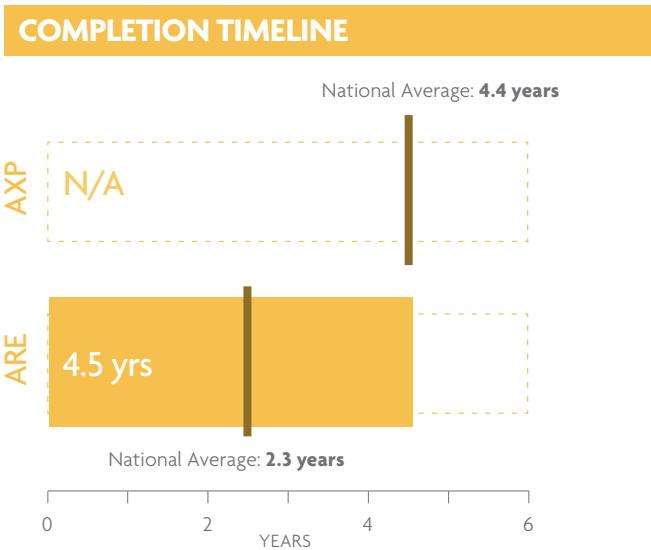
This report provides an overview of the progression to licensure for aspiring architects in this jurisdiction during the calendar year 2019.

The report provides insights into the number of candidates working toward completing two of the core requirements for architecture licensure: gaining professional experience and completing the nationally recognized exam. The third core requirement is earning a degree in architecture, typically from a program accredited by the National Architectural Accrediting Board (NAAB). It also provides an overview of their collective progress toward completing these programs.

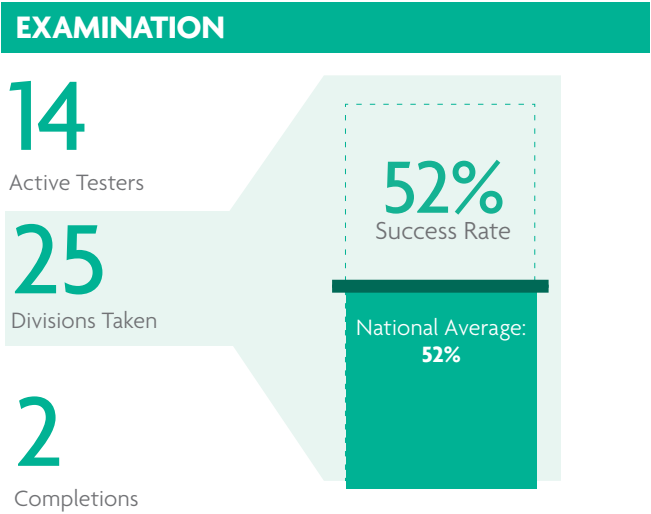
In addition, the report provides insight into the length of time candidates in this jurisdiction typically take to complete the experience and examination requirements, and the total number of licenses issued by the Board in the calendar year. The national averages for these data points are provided for reference.



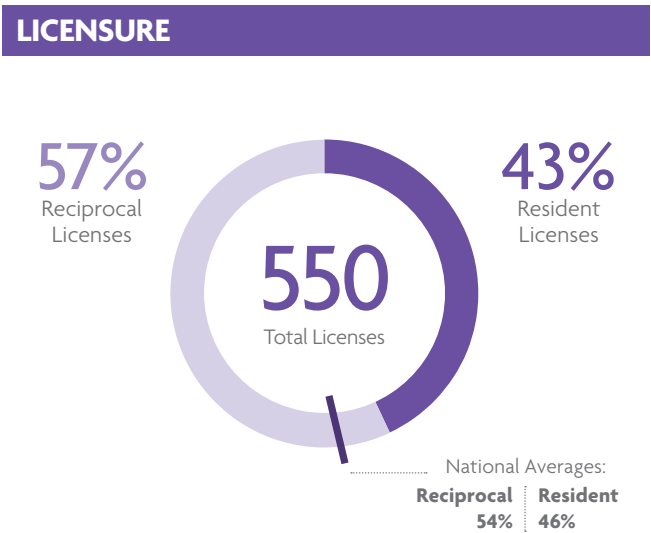
The AXP provides a framework for candidates to earn professional experience. Candidates are required to record 3,740 hours of experience across six practice areas to complete the AXP.



This reflects the median time candidates take to complete each of the two core components for licensure. The ARE and AXP can be taken concurrently.



The ARE is a six division exam required by all 50 states and additional territories as a core component for licensure.



The national average is 46% Resident (Applicant's primary residence is within the state), and 54% reciprocal (Applicant's primary residence is out of state).

The report also explores the demographics of both candidates for licensure and licensed architects in this jurisdiction, including their age, race, ethnicity, and gender.

This data is provided by the National Council of Architectural Registration Boards’ (NCARB) annual data report NCARB by the Numbers.

NCARB is made up of the architecture licensing boards from all 50 U.S. states, the District of Columbia, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.

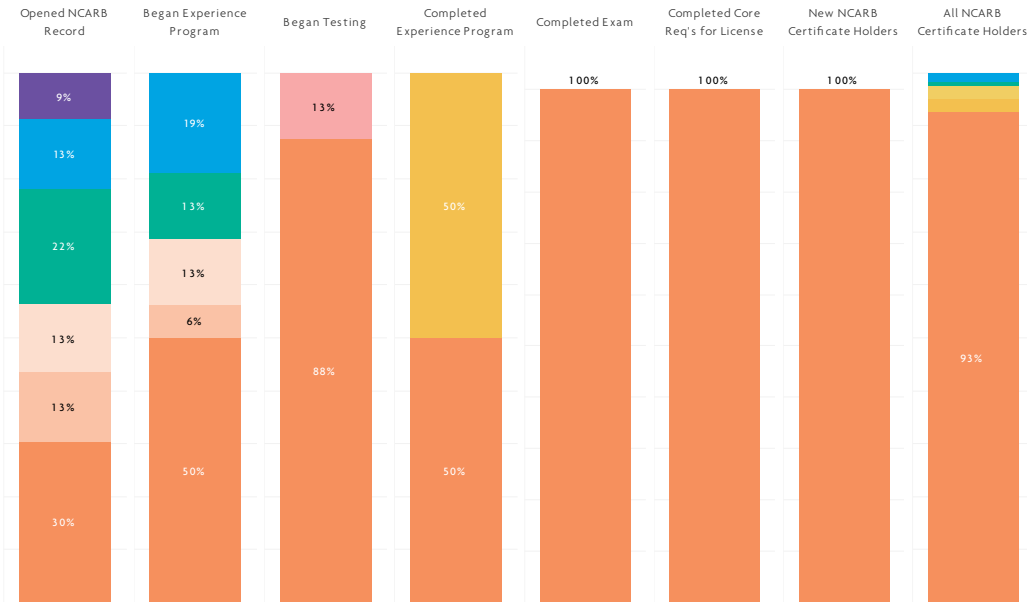
Racial and Ethnic Diversity

This chart shows the approximate racial and ethnic diversity of individuals at each stage of the process of earning an architect’s license who are seeking licensure in this jurisdiction, for the calendar year 2019.

Note: NCARB uses the same categories for race and ethnicity as the U.S. Census Bureau.

Racial and Ethnic Representation Across Career Stages

This chart shows the proportion of individuals who identify as each race or ethnicity at various stages in their architecture career.



Key
Demographics are listed as: race, ethnicity. A designation of “no data available” means that the individual has chosen not to identify either their race or ethnicity. For instance, “White, no data available” indicates that the Record holder identified their race as white but has not identified their ethnicity.

Record holders who choose not to identify both race and ethnicity are excluded from this chart.

- American Indian or Alaska Native, Hispanic or Latino
- American Indian or Alaska Native, No Data Available
- American Indian or Alaska Native, Not Hispanic or Latino
- Asian, Hispanic or Latino
- Asian, No Data Available
- Asian, Not Hispanic or Latino
- Black or African American, Hispanic or Latino
- Black or African American, No Data Available
- Black or African American, Not Hispanic or Latino
- Native Hawaiian or Other Pacific Islander, Hispanic or Latino
- Native Hawaiian or Other Pacific Islander, No Data Available
- Native Hawaiian or Other Pacific Islander, Not Hispanic or Latino
- No Data Available, Hispanic or Latino
- Other, Hispanic or Latino
- Other, No Data Available
- Other, Not Hispanic or Latino
- White, Hispanic or Latino
- White, No Data Available
- White, Not Hispanic or Latino

Note: Each bar represents a different cohort of individuals, based on their status in the 2019 calendar year. Only records which have provided this data are included.

Gender Representation

This chart shows the approximate gender split of individuals at each stage of the process of earning an architect's license who are seeking licensure in this jurisdiction, for the calendar year 2019.

Note: NCARB recognizes that not all individuals identify as male or female. However, NCARB's data currently uses the same sex categorization as the U.S. Census Bureau.

Career Stages

New NCARB Record Holders: This stage includes all individuals who started an NCARB Record in 2019. Starting an NCARB Record is an approximation for beginning the path to licensure, as all candidates need an NCARB Record to document the education, experience, and examination requirements for licensure.

Experience Start: This stage includes all individuals who began the experience program in 2019.

Examination Start: This stage includes all individuals who took their first division of the national exam, the Architect Registration Examination® (ARE®), in 2019.

Experience Complete: This stage includes all individuals who completed the experience program in 2019.

Examination Complete: This stage includes all individuals who passed their final ARE division in 2019.

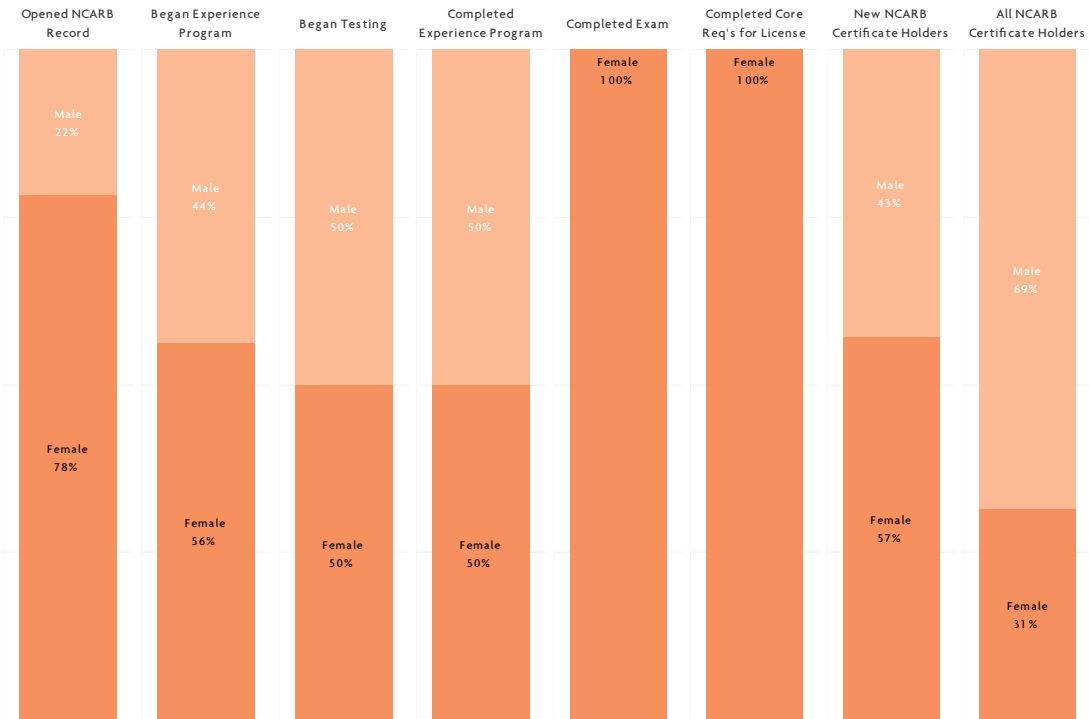
Core Requirements Complete: This stage includes all individuals who finished their final “core requirement” for licensure in 2019. Core licensure requirements include education, experience, and examination, although some jurisdictions do have additional requirements. This stage is an approximation for individuals who received an initial license in 2019.

New Certificate Holders: This stage includes individuals who earned their NCARB Certificate—a credential that facilitates out-of-state licensure—in 2019.

All Certificate Holders: This stage includes all individuals who hold an NCARB Certificate, which can be used to approximate the makeup of the architect population in this jurisdiction.

Gender Representation Across Career Stages

This chart shows the proportion of men and women at various stages in their architecture career.



Note: Each bar represents a different cohort of individuals, based on their status in the 2019 calendar year. Only records which have provided this data are included.

Remote Proctoring Update	1
Go Behind the Scenes with NCARB Webinar Series	2
Research Page on Member Board Community	3
Upcoming Events	3

Remote Proctoring Update

NCARB is steadily working toward offering the Architectural Registration Examination® (ARE®) through an online format. Keep in mind, the changes being made to enable the ARE to be delivered via online proctoring will NOT change the content being assessed on the exam. Additionally, the current six-division structure of the ARE, which aligns with the six experience areas of the Architectural Experience Program® (AXP®) will not change. **Member Boards do not need to change their procedures related to the ARE.**

What is Changing?

What is going to change to enable remote proctoring relates to the way in which the ARE is delivered. In the past few months, we've conducted research to provide us with confidence and the ability to make necessary adjustments to the number of questions and the length of each division, while ensuring exam reliability and validity. NCARB is also changing the way candidates will proceed through each division to increase the security of the exam, as they will need to complete smaller sections one at a time. Once the candidate completes a section, those items will become locked and they will no longer be able to access or change their responses.

Available Resources

NCARB will continue to share information related to remote proctoring with our members as soon as it becomes available. Be sure to check the [Member Board Community](#) for updates and upcoming events, as well as the following resources:

- [Remote Proctoring Fact Sheet](#)
- [Remote Proctoring Talking Points](#)
- [“Remote Proctoring 101” webinar](#)—which occurred on July 28, 2020, in collaboration with our ICOR partners
- [NCARB Blog](#)
- [ARE Update emails](#)

Additionally, NCARB will hold a “Remote Proctoring 201” webinar as part of our summer webinar series on August 26, 2020, from 2 – 3 p.m. ET. [Register](#) for the webinar.

Stay tuned for more information related to remote proctoring in the coming weeks. For questions, please reach out to Council Relations at council-relations@ncarb.org or Vice President of Examination Jared N. Zurn, AIA, NCARB, CAE, at jzurn@ncarb.org.

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years of protecting
the health, safety, and
welfare of the public.*

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WWW.NCARB.ORG

Additional Rolling Clock and Test Activity Status Extensions

After monitoring the ongoing disruption of testing due to the COVID-19 pandemic, as well as the backlog of candidate appointments yet to be made up because of test center closures earlier this year, **NCARB will administer what we expect to be a final rolling clock extension to all passing exam scores that were valid as of March 1, 2020.** Combined with the previous nine-month extensions, all valid exam scores will have received a total of a 15-month rolling clock extension. This ensures that we will have the online proctoring option available with Prometric well in advance of any candidate being impacted by NCARB's rolling clock policy. Not only will the online proctoring option provide greater access to testing appointments, but also provide a safer alternative for candidates who may have underlying health conditions to test with more ease.

Along with the rolling clock extension, we will also automatically adjust each candidate's Test Activity Status date to ensure that their eligibilities to test are not inadvertently closed before providing them access to more testing opportunities. **Both extensions will be automatically applied on or before August 25, 2020. Candidates do not need to take any action or apply to receive this extension and have been already notified about these updates.**





Go Behind the Scenes with NCARB Webinar Series

Get the director's cut on our programs and services with our own summer "film festival"—a webinar series for Member Board Members and Executives!

We'll take you behind the scenes for a detailed look at topics designed with the licensing board in mind, starting with remote proctoring. From now through the end of August, NCARB staff will host a webinar every other week, with in-depth information and a Q&A session during each webinar.

Now Playing



Watch a recording of these past webinars:

- [NCARB Backstage Pass: Examination Development and Delivery](#) 
- [ICOR Town Hall: All About Remote Proctoring](#) 
- [NCARB and Data: Inside NCARB By the Numbers](#) 
- [NCARB Backstage Pass: Services to Member Boards: Records, Transmittals](#) 


Coming Soon



Mark your calendars now for the following webinars:

- August 26 (2 – 3 p.m. ET): [NCARB into the Future: Remote Proctoring 201](#) 

Stay tuned for more details on topics and dates throughout fall 2020 and beyond. To access each scheduled webinar, you will need to register in advance. Please register for each webinar separately by clicking on the topic above. Information has also been posted on the [Member Board Community](#) . For questions, please reach out to Council Relations at council-relations@ncarb.org .


Research Page on Member Board Community

In July, we launched our new [Member Board Community](#) . This enhanced platform allows our Member Board Members (MBMs), Member Board Executives (MBEs), committee volunteers, and other members of the NCARB community to better connect and get the latest news and resources.

The Member Board Community features the most up-to-date information on events, webinars, programs, services, as well as the newly added [research](#)  section. The Council Relations team continues to conduct and provide research data to help support Member Boards. Should you have any questions or would like to request more information on the matter, please email Council Relations at council-relations@ncarb.org .

Upcoming Events


October 21: Member Board Chairs and Member Board Executives Leadership Summit

This virtual Leadership Summit will cover a range of topics, including program updates, breakout discussions for Chairs & Executives, and a Town Hall with NCARB leadership. The agenda and additional details are forthcoming. Please do not hesitate to contact the Council Relations team at council-relations@ncarb.org  if you have any questions in the interim. The event will take place on October 21, from 10 a.m. to 4 p.m. ET.

October 26-30: Licensing Advisors Retreat Week

Mark your calendar now for this free, week-long virtual event, where you'll have the opportunity to get training, share resources, and discuss recent shifts impacting the profession.

During the week of October 26-30, we'll be offering two educational sessions custom-tailored to architect licensing advisors occurring at 1 and 4 p.m. (ET) each day. You can expect to end the day with a happy hour at 7:30 p.m. (ET), designed to maximize networking opportunities through an informal Q&A setting featuring the speakers of the day and other special guests.

In the coming weeks, you'll receive more details about the registration process, speakers, and other important information to join the virtual sessions. Check the [Architect Licensing Advisors Community](#)  for updates along the way.

Have questions? Please contact us at advisors@ncarb.org .

In This Issue

[Online Proctoring](#)

[Education Standard](#)

[A Recap of NCARB's Summer Webinar Series](#)

[Upcoming Events](#)

Online Proctoring

NCARB is excited to announce that Architect Registration Examination® (ARE®) candidates will have the option to test [online](#), in-person, or a combination of both in mid-November 2020. As test center closures and limited availability continue to impact candidates' licensure progress, this new option will provide flexibility to take the exam in a location of their choice.

Here are some key takeaways to keep in mind:

- Changes that will make online proctoring possible for candidates are expected to launch **November 16, 2020**
- Candidates can still test in-person at Prometric test centers if they choose to do so
- The exam's content and division structure will not change
- Aspects of the exam's delivery are being updated for both in-person and online administrations to increase exam security and provide a more efficient experience
- More information about exam delivery changes will be released in late-September 2020
- NCARB expects to release updated versions of the *ARE Guidelines*, *ARE Handbook*, and demo exam in October 2020
- Ongoing developments to the ARE, including the implementation of online proctoring, will maintain the exam's rigor, while providing candidates with greater flexibility and accessibility
- In summer 2021, NCARB will switch to a new test administration vendor, [PSI](#), for both in-person and online testing

We will continue to share information regarding online proctoring with our members as soon as it becomes available. Be sure to check the [Member Board Community](#) for updates and upcoming events, as well as the following resources:

- [Candidate Announcement Email and FAQ – New!](#)
- [Remote Proctoring 201 Webinar – New!](#)
- [Remote Proctoring Fact Sheet](#)
- [Remote Proctoring Talking Points](#)
- [Remote Proctoring 101 Webinar](#)
- [NCARB Blog](#)
- [ARE Update Emails](#)

For additional questions, please reach out to the Council Relations team at council-relations@ncarb.org.

Education Standard

Effective on January 6, 2021, the 2020 *NCARB Education Standard* will be implemented to ensure alignment with the 2020 *NAAB Conditions for Accreditation* adopted earlier this year.

The *NCARB Education Standard* is an approximation of the requirements of a professional degree from a program accredited by the National Architectural Accrediting Board (NAAB). It includes general studies, professional studies, and electives, which together comprise a professional education in architecture.

To ensure the *Education Standard* continues to align with the *NAAB Conditions*—and serve as a guide for Certificate Portfolio applicants without an accredited degree—NCARB has implemented the following changes:

1. Two subject categories have been broken out explicitly and added to the *Education Standard*
 - “History and Theory of Urbanism” added to the “History, Theory, and Human Behavior” subject area
 - “Building Performance” added to the “Building Technology” subject area
2. Word changes to utilize more common terminology
 - “Quantitative Reasoning” updated to “Mathematical Sciences”
 - “History and Theory” updated to “History and Theory of Architecture”
 - “Human Behavior” updated to “Human Health and Behavior”
3. Additional means to address education deficiencies through EESA (Education Evaluation Services for Architects)
 - Relevant courses from university-based engineering or construction management programs have been added to the acceptable options for fulfilling deficiencies for certain individual requirements
4. Reduction of the design categories from four to three areas of deficiencies:
 - Fundamental Design
 - Investigative Design
 - Design and Building Integration
5. Minor adjustments to credit hour requirements for EESA
 - 45 semester credit hours in “General Education” reduced to 42 semester credit hours in “Liberal Arts”
 - 42 semester credit hours in “Design” reduced to 40 semester credit hours in “Design Synthesis”

The updated [Education Guidelines](#) with detailed descriptions of subject areas, categories, and semester credit hour requirements will be available after January 6, 2021.

A Recap of NCARB's Summer Webinar Series

Our Backstage Pass Summer Webinar Series wrapped up in late-August, ending the series with five webinars that gave attendees a behind-the-curtain look at current NCARB programs and initiatives. We'd like to thank all of our featured presenters for the information provided, as well as all of those who attended! We hope that our summer series was informative and beneficial to our community.

Weren't able to join us live for some or all of our sessions? Recordings for each of our webinars are now available on the Member Board Community, or by clicking on the links below:

- [Examination Development and Delivery](#)
- [ICOR Remote Proctoring 101](#)
- [Inside NCARB by the Numbers](#)
- [Services for Member Boards: Records, Transmittals](#)
- [Remote Proctoring 201](#)

Stay tuned for announcements on future webinars soon! Should you have questions or would like to provide us with feedback, please reach out to the Council Relations team at council-relations@ncarb.org.

Upcoming Events

October 21: Member Board Chairs (MBC) and Member Board Executives (MBE) Leadership Summit

This virtual Leadership Summit will cover a range of topics, including program updates, breakout discussions for Chairs & Executives, and a Town Hall with NCARB leadership. The agenda and additional details are forthcoming. Please do not hesitate to contact the Council Relations team at council-relations@ncarb.org if you have any questions in the interim. The event will take place on October 21, from 10 a.m. to 4 p.m. ET.

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In the coming weeks, you'll receive more details about the registration process, speakers, and other important information to join the virtual sessions. Check the Architect [Licensing Advisors Community](#) for updates along the way.

Have questions? Please contact us at advisors@ncarb.org.

In This Issue

[Backstage Pass Webinar Series](#)
[Online Proctoring Update](#)
[Member Board Pipeline Project](#)
[Welcome New Member Board Members](#)
[Upcoming Events](#)

Backstage Pass Webinar Series

The Backstage Pass webinar series is officially underway. Get a behind-the-scenes look at our programs and services with a webinar series exclusively for Member Board Members (MBMs) and Member Board Executives (MBEs).

From October until December of this year, NCARB staff will host a webinar each month, with in-depth information and a Q&A session included in each webinar. As an additional opportunity to provide feedback from MBEs and board staff, we will also be hosting a Council Hour within the week of each webinar. Here, you can engage with fellow MBEs and NCARB staff. In addition to discussing content from the most recent webinars, these will also be an opportunity to share updates pertinent to the MBE community.

Mark your calendars for the following webinar and Council Hour dates:

Online Proctoring Implementation, Security, and Upcoming Transition

During this webinar, attendees will be provided a final overview and update on the online examination delivery option launching on December 14, including more information on the technology, candidate experience, and safety measures. [Click here](#) to register.

- Webinar: November 12, 2020, from 2 – 3 p.m. ET
- Council Hour: November 17, 2020, from Noon – 1 p.m. ET

Data Themed: NCARB/NOMA Survey Data

During this webinar, attendees will learn more about a survey NCARB and the National Organization of Minority Architects (NOMA) partnered on to explore candidates' experiences while pursuing licensure. [Click here](#) to register.

- Webinar: December 2, 2020, from 2 – 3 p.m. ET
- Council Hour: December 9, 2020, from Noon – 1 p.m. ET

Unable to join a webinar live? Visit the [Member Board Community](#) to view past webinar recordings, including:

- [Deep Dive Into the Professional Conduct Committee](#)

Online Proctoring Update

To better ensure the quality of the Architect Registration Examination® (ARE®) when the online proctoring option is launched, NCARB has delayed the launch of online proctoring. **The new expected launch date is December 14, 2020.**

Both the online proctored testing option and the [anticipated changes](#) to the exam are now expected to launch on December 14, 2020. This includes the reduction in the number of items, adjustments to exam appointment times, transition to the digital whiteboard tool, and the updated break policies.

Once implemented, **all exam changes will apply to both in-person and online exam appointments**—including those scheduled to take place on December 14, 2020.

Why is NCARB updating the timeline?

As part of our quality assurance process, NCARB has identified a number of potential improvements to the updated exam that we believe will enhance the candidate experience. Moving the launch date helps us ensure a higher quality testing experience and may provide more time for candidates to adjust to the upcoming changes.

What does this mean for candidates?

If candidates have an exam appointment scheduled between now and December 13, 2020, the version of the ARE they experience will be the current version, with the policies, tools, and number of items outlined in the current [ARE 5.0 Guidelines](#) and [ARE 5.0 Handbook](#). Candidates will receive immediate provisional feedback before leaving the test center, and their score report will not be delayed. If candidates have an exam appointment scheduled to take place on December 14, 2020, or later, they will experience the updated version of the ARE, with the exam changes detailed in our [Guide to Online Proctoring and ARE 5.0](#), and policies/content outlined in the newly updated version of the [ARE 5.0 Guidelines](#) and [ARE 5.0 Handbook](#). Candidates testing within the first four weeks of the launch will likely experience score report delays while the new cut score is established.

What can Member Boards expect next?

NCARB anticipates launching the updated demonstration exam in early-November. This update will feature the new digital whiteboard tool, as well as additional changes aligning with the launch of online proctoring, such as the new break feature and navigation. In addition, NCARB will be lengthening the demo exam to include 75 practice items (addressing topics from all six divisions), with a testing time of three hours, to help better prepare candidates for a real test experience. The updated demo exam will be accessible through candidates' My NCARB account. In the meantime, NCARB will continue updating the free resources available to our candidate community, including the ARE Prep videos. We will continue providing Member Boards with updates as new information and resources are available.

Attached for further details is a special edition [Fast Facts](#), as well as updated [Talking Points](#).

For more information, please visit the [Member Board Community](#). Should you have any questions on the matter, please reach out to the Council Relations team at council-relations@ncarb.org.

Member Board Pipeline Project

NCARB is committed to expanding the diversity within the NCARB Community—including the Board of Directors, members of jurisdictional licensing boards, and committee volunteers—so that as a Council, we can better reflect the public we serve. As a result, we have launched a new initiative called the Member Board Pipeline Project.

As part of our Member Board Pipeline Project, NCARB is working to better understand the process and requirements for serving on each of the 55 U.S. architectural licensing boards. This will allow us to advocate for equity, diversity, and inclusion where necessary, with the ultimate goal of increasing fair and equal representation throughout the Council's leadership and volunteer positions.

To help us understand the board appointment process, we created a [short survey](#) for Member Board Members to share their pathway and requirements to board service.

This [survey](#) should take less than five minutes to complete. Your participation in the survey will help us better support you and enable us to work with licensing boards to ensure that our membership reflects the diverse communities we serve. If you have any questions, please don't hesitate to contact the Council Relations team at council-relations@ncarb.org.

Welcome New Member Board Members

We'd like to introduce the following new Member Board Members:

- **Tim Colley** joined the Virginia Board as an architect member.
- **Curtis Harkin** joined the Delaware Board as an architect member.
- **Jedd Walker** joined the Idaho Board as an architect member.
- **Brenee King** joined the Kansas Board as a public member.
- **Mark Flemming** joined the Maryland Board as an architect member.
- **Mark W. Nolt** joined the Missouri Board as a land surveyor member.
- **Melanie Doss** joined the Tennessee Board as a registered interior designer member.

Upcoming Events

December 4-5: NCARB Committee Summit

FY21 committees with joint charges will have the opportunity to meet virtually over two days in early-December. More details, including registration and meeting agendas will be made available soon. For questions about Committee Summit, please contact the Council Relations team at council-relations@ncarb.org.

BACK TO EDITOR

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ARE update

NCARB

Dear Candidate,

NCARB is issuing an additional six-month rolling clock extension to Architect Registration Examination® (ARE®) candidates and has expedited efforts in order to launch an online proctored version of ARE 5.0 in late 2020.

Additional Rolling Clock Extension

This month, **NCARB will administer an additional six-month rolling clock extension** to all passing exam scores that were valid as of March 1, 2020. Combined with the previous nine-month extensions, all valid exam scores will have received a total of a 15-month rolling clock extension. This ensures that no exam scores are impacted by the rolling clock until June 2021 at the earliest.

The extension will automatically be applied to your valid ARE division scores on or before August 25, 2020. You do not need to take any action or apply to receive this extension.

With many candidates uncomfortable testing at physical test centers during the ongoing pandemic and others struggling to find available appointment times, this extension provides the opportunity to wait for a remote proctored testing option without facing immediate rolling clock impacts.

Test Activity Status Extension

NCARB will automatically administer a 15-month extension to all “Test Activity Status” dates for ARE candidates to align with the combined rolling clock extensions. Your Test Activity Status is tied to your exam eligibilities as granted to you by your licensing board.

This extension ensures that your exam eligibilities will not expire due to an inability to test during the COVID-19 disruption. **The Test Activity Status extension will be automatically applied to your NCARB Record on or before August 25, 2020.** You do not need to take any action or apply to receive this extension.

Online Proctored Delivery of the ARE

NCARB continues to pursue development and implementation of an online (or remote) proctored option for the ARE. The content of the ARE and the division structure will not change. While NCARB initially anticipated launching this option in early-2021, **recent progress will allow for an earlier-than-anticipated launch of remote proctoring in late-2020.** Be on the lookout for an announcement with additional details on online proctored delivery in the weeks ahead.

For additional support, please [contact us online](#) or at 202-879-0520. We appreciate your patience.

[National Council of Architectural Registration Boards](#)
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Washington, DC, 20005



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Architect Registration Examination® (ARE®) 5.0

GUIDELINES

Introduction 2

What is the ARE?	2
About NCARB	3
Licensure	4
NCARB Certification	5

Steps to Completing the ARE 6

Step 1: Establishing Your Eligibility to Test	6
Step 2: Scheduling an Exam Appointment	8
Step 3: Taking the ARE	15
Step 4: Receiving Your Score	25
Step 5: Retaking the ARE	26

What is the ARE?

The Architect Registration Examination® (ARE®) is developed by the National Council of Architectural Registration Boards (NCARB). The ARE is used by U.S. jurisdictions as the registration examination for candidates seeking architectural registration. It is also accepted by select Canadian provincial and territorial architectural associations for registration.

The ARE assesses a candidate's knowledge and skills to provide various services required in the practice of architecture. No single examination can test for competency in all aspects of architectural practice; the ARE is not intended for that purpose. The ARE concentrates on the professional services that affect the public's health, safety, and welfare.

In addition to testing for competence in specific subject areas, NCARB is aware of the responsibilities an architect may have for coordinating the activities of others involved in the design/construction process. The ARE assesses a candidate's qualifications in exercising the skills and judgment of a generalist working with numerous specialists.

Languages

The ARE is only available in English.

Units of Measurement

The ARE includes measurements in inch-pound units only.

ARE 5.0 consists of the following six divisions:

Practice Management

Project Management

Programming & Analysis

Project Planning & Design

Project Development & Documentation

Construction & Evaluation

About NCARB

The National Council of Architectural Registration Boards' membership is made up of the architectural licensing boards of the 50 states, the District of Columbia, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. NCARB, in collaboration with these boards, facilitates the licensure and credentialing of architects to protect the health, safety, and welfare of the public.

To achieve these goals, NCARB works with its Member Boards and volunteers to develop and facilitate standards for licensure, including the national examination and experience program. NCARB also recommends regulatory guidelines for licensing boards and helps architects expand their professional reach through the NCARB Certificate.

NCARB SERVICES

NCARB exists to help you advance from student to practicing architect, so our services span the many phases of your career—think of us as your professional guide. Whether you're navigating the Architectural Experience Program® (AXP®), completing the Architect Registration Examination® (ARE®), or earning your NCARB Certificate, NCARB is here to help.

We can store all your major milestones, including official transcripts, employment history, examination successes, and more—a safe record of all of your achievements and accomplishments, ready to be transmitted to the jurisdiction of your choice.

NCARB Mission

NCARB, in collaboration with licensing boards, facilitates the licensure and credentialing of architects to protect the health, safety, and welfare of the public.

Licensure

Before you can officially call yourself an architect, you have to earn a license. Once you do, you'll prove to your firm and your community that you're able to protect the health, safety, and welfare of those who live and work in the built environment. Each licensing board has its own set of requirements, but navigating them doesn't have to be complicated. NCARB has developed a number of tools and resources to help you succeed in meeting your jurisdiction's specific standards in the following three areas:

Licensure/Registration

NCARB uses the words "licensure" and "registration" interchangeably when talking about the process of becoming an architect.



EDUCATION

The recommended first step to becoming an architect is finding a school that offers a professional degree in architecture from a program accredited by the [National Architectural Accrediting Board \(NAAB\)](#).

With over 120 schools to choose from, the NAAB can help you find a school that fits your vision—or you can take advantage of the education alternatives that some jurisdictions offer. More information about starting your education in architecture can be found in the [Education Guidelines](#).



EXPERIENCE

Licensure candidates also have to gain experience under the supervision of a practicing architect. The AXP provides the framework to guide you through earning and recording your professional experience—covering everything from site design to project management. And you can start reporting experience after graduating high school or an equivalent.

We know you'll be busy learning the ins and outs of architecture. That's why we offer a number of tools—including a free mobile app—that can help you log experience hours and understand the program requirements. And since completing the AXP is a core component for certification, you'll be on your way to earning your NCARB Certificate, too.

More information about earning experience can be found in the [AXP Guidelines](#).



EXAMINATION

Another key part of becoming an architect is demonstrating your knowledge and skills through the ARE. With exam divisions that are designed to reflect the current profession, the ARE assesses your competency to practice architecture independently. Passing the exam is another big step toward finally getting that license.

Whenever you need a helping hand, our tips, guides, and inspiring success stories are there to make sure you have what you need to get it done. To learn more about the exam, each division, and tips to start planning, read this document and the [ARE 5.0 Handbook](#).

NCARB Certification

Following initial licensure, obtaining an NCARB Certificate ensures you can get the most out of your career in architecture. It provides mobility and signifies that you have met the national standards that guide the 55 licensing boards. With an NCARB Certificate in hand, it's simpler to get licensed across jurisdictions—allowing you the freedom and flexibility to pursue your career and connect with clients regardless of location.



BENEFITS OF THE CERTIFICATE

Once you've earned your NCARB Certificate, you can take advantage of all the following benefits:

NCARB Credential

Obtaining and maintaining an NCARB Certificate demonstrates that you've met national standards. You can now use the letters "NCARB" after your name.

Reciprocity

The Certificate streamlines the process for obtaining a license in a new jurisdiction.

Mobility

Gaining reciprocity in multiple jurisdictions allows you the freedom to go wherever the work takes you.

Competitive Edge

Setting yourself apart from other architects can be key for your career; the greater flexibility you'll enjoy as a Certificate holder is often an important factor for firms when hiring and promoting.

Security

As an NCARB Certificate holder, you don't have to worry about record keeping—all your information is stored on our secure servers, ready whenever you need it.

Free Continuing Education

Earning continuing education hours in Health, Safety, and Welfare (HSW) has never been easier, thanks to NCARB's online [Continuum Education Program](#)—free for Certificate holders!

For more information about how to access all the opportunities the NCARB Certificate has to offer, read the [Certification Guidelines](#).

Step 1: Establishing Your Eligibility to Test

In order to take the ARE, you must establish an NCARB Record and meet the ARE eligibility requirements of the board of architecture in the jurisdiction where you want to be licensed to practice architecture. To establish your NCARB Record, fill out the online application at www.ncarb.org.

To begin taking the ARE, request eligibility via the “Exams” tab in your NCARB Record. Your board of architecture will deem you eligible (or via NCARB for boards participating in [NCARB's Exam Eligibility Services](#)), and your board will establish your eligibility information in your NCARB Record.

You will receive an automated email notification when you are made eligible to take the ARE.

- Verify that the first and last name indicated in your NCARB Record is accurate and matches the first and last name printed on your primary form of identification. If your first and last name are incorrect, immediately notify [NCARB Customer Relations](#). **Do not schedule an appointment to test until you have verified that the first and last name in your NCARB Record matches the first and last name on your primary form of identification.** If the first and last name in your NCARB Record does not match your primary form of identification, you will not be admitted to the examination, and there will be no refund of your test fee.
- If you need to change the name shown in your NCARB Record, you must send a written request and official documentation to [NCARB Customer Relations](#). Name discrepancies must be resolved at least one week prior to a scheduled exam appointment.
- Updates to your address can be made in your NCARB Record.

WHAT ARE NCARB'S EXAM ELIGIBILITY SERVICES?

Exam Eligibility Services means NCARB manages eligibilities for candidates in participating jurisdictions who meet NCARB's current education and experience requirements. If your jurisdiction participates in Exam Eligibility Services, but you don't meet the education and experience requirements, [contact NCARB online](#) or call 202-879-0520 to learn about possible alternative methods to receive exam eligibilities.

Step 1: Establishing Your Eligibility to Test

MAINTAINING ELIGIBILITY

Test Activity Status

Most jurisdictions have implemented a test activity requirement to maintain exam eligibilities. Your eligibilities to test may expire if no attempt to test (pass or fail) has been completed within a five-year period. If your state-based eligibility period expires before you successfully complete all divisions of the ARE, you must contact your board of architecture (or NCARB if you were made eligible to take the ARE through a jurisdiction participating in the Exam Eligibilities Services Program) to establish a new eligibility under the then current procedures of the registration board.

NCARB's Rolling Clock

A passing grade for any division of the ARE shall be valid for an initial period of five years plus any extensions granted under the rolling clock extension policy, after which time the division will expire unless the candidate has completed the ARE.

Rolling Clock Extension Process

Candidates can receive an extension to their rolling clock for the birth or adoption of a child, or if their ability to test on the ARE was not possible due to a serious medical condition, active military service, or other like causes.

In order to be considered for a rolling clock extension, as prescribed by NCARB in the [Rolling Clock Extension Request Form](#), applicants must submit requests for a rolling clock extension directly to NCARB. Any request, including appropriate back-up documentation and a completed Rolling Clock Extension Request Form, must be received by NCARB by your NCARB Rolling Clock end date.

Maintaining Exam Eligibility with Your Jurisdiction

You are responsible for maintaining your exam eligibility with your registration board. Because the rules vary from board to board and are subject to change, it is important for you to stay informed of your individual registration board's policies and procedures. This includes notifying them of any address changes so they can contact you about eligibility renewals or any other important licensure information.

PLEASE NOTE

In addition to NCARB's Rolling Clock Policy, your jurisdiction may have its own retake limit/exam validity time frame. Please contact your jurisdiction directly to determine your exam status under its rules and policies.

COVID-19 Update: A 15-month rolling clock extension was applied to all valid exam scores as of March 1, 2020 to ensure no candidate passing score has been impacted by limited test center availability throughout the pandemic.

Step 2: Scheduling an Exam Appointment

SCHEDULING

When you have been made eligible to test, you can schedule to sit for individual divisions of the ARE. You may take any division of the ARE at any time, and in any sequence you choose. You are not required to take the ARE in the same jurisdiction where you are seeking initial registration.

Testing reservations are accepted on a first-come, first-served basis and are restricted by seat availability at each Prometric test center and by proctor availability for online proctored delivery. You must schedule your appointment a minimum of three business days in advance of the test date. Saturday and Sunday are NOT considered business days. Walk-in appointments are not allowed.

The divisions you are eligible to take are indicated in your NCARB Record. **You must pay for and schedule a separate appointment for each division of the ARE.**

- Any divisions eligible to be scheduled will be displayed with a pay and schedule link in your NCARB Record.
- All appointments must be scheduled through your NCARB Record.

Once you purchase an "open seat," your fee CANNOT be refunded. You will receive a confirmation email for each appointment scheduled. Cancellation of a scheduled appointment is NOT permitted. If you cancel an exam, regardless of reason, your testing fee is non-transferable and non-refundable.

RESCHEDULING

You can reschedule an existing appointment if the originally scheduled appointment date is four or more business days away. Saturday and Sunday are NOT considered business days. Leaving a message on the local test center answering machine is NOT an acceptable method of rescheduling your appointment.

For both test center and online proctored delivery, you may reschedule an existing appointment of one type to a new appointment of the other type. You will need to select a new date and time. Standard [rescheduling fees](#) will apply.

Rescheduling an appointment can ONLY be done via your NCARB Record. Any changes to scheduled appointments will be subject to the rescheduling fees. If you fail to arrive for your scheduled appointment or attempt to reschedule an appointment without giving the required notice, you will forfeit the entire test fee.

TEST CENTERS

NCARB makes the ARE available at Prometric test centers and through Prometric online proctored delivery. Candidates are provided a consistent and secure testing experience in both delivery modalities.

Step 2: Scheduling an Exam Appointment

EXAM DIVISIONS AND DURATIONS

DIVISION	NUMBER OF ITEMS	TEST DURATION	ALLOWED BREAK TIME	TOTAL APPOINTMENT TIME*
Practice Management	65	2 hr 40 min	30 min	3 hr 20 min
Project Management	75	3 hr	30 min	3 hr 40 min
Programming & Analysis	75	3 hr	30 min	3 hr 40 min
Project Planning & Design	100	4 hr 5 min	45 min	5 hr
Project Development & Documentation	100	4 hr 5 min	45 min	5 hr
Construction & Evaluation	75	3 hr	30 min	3 hr 40 min
TOTAL TIME:		19 hr 50 min		24 hr 20 min

* Total appointment time includes 10 minutes for introductory and exit screens.

Step 2: Scheduling an Exam Appointment

TESTING ACCOMMODATIONS

Do you have a documented disability or temporary condition that requires accommodations? NCARB is committed to ensuring the availability of reasonable accommodations for qualifying individuals by making feasible modifications to our examination procedures for candidates with documented conditions.

In order to protect exam security, maintain the validity of the exam, and meet the overall delivery capabilities of the ARE, there are limits to the accommodations that NCARB and Prometric are able to provide. NCARB will use the Americans with Disabilities Act (ADA) as a guide when evaluating requests. Common examples of reasonable accommodations include additional break time, extended testing time (up to 50 percent longer), and testing in a separate room within the test center.

Testing accommodations are granted to allow equal access to the ARE and to ensure fairness to all candidates while remaining consistent with ADA principles, NCARB will not grant requests that will alter the measurement of the skills or knowledge that the ARE is intended to test or result in an undue burden on NCARB or Prometric.

HOW TO REQUEST TESTING ACCOMMODATIONS

Accommodations must be approved prior to the scheduling of an exam appointment.

You must make your request directly to [your board of architecture](#), or to NCARB if your board participates in Exam Eligibility Services. [Contact us](#) to receive the testing accommodations request form.

You may provide documentation of past accommodations, if any, to support your request, and a specific diagnosis by an appropriately licensed professional that includes a description of the accommodations that are appropriate for your condition.

Once you have been approved for testing accommodations, you will receive notification and instructions on how to make an appointment. While some appointments may be able to be scheduled through your NCARB Record, depending on the accommodation, it may be necessary to schedule by phone. DO NOT attempt to schedule any exam appointments until you receive written notification that accommodations have been approved.

PLEASE NOTE

Some available accommodations (e.g. Reader, Sign Language Interpreter, etc.) are not supported for an online proctored appointment. Candidates requiring these accommodations will be required to test in a test center. If your testing accommodation request is determined to require onsite testing only, NCARB Customer Service will advise you accordingly during the evaluation process.

Step 2: Scheduling an Exam Appointment

TESTING ACCOMMODATIONS: PRE-APPROVED PERSONAL ITEMS

Please note that candidates do NOT need to request testing accommodations for the specific items indicated below. However, if any other accommodations are needed that are NOT listed below, the formal testing accommodation request process indicated previously must be followed.

For example, if you wear an insulin pump (which by itself does not require approval) and require a separate room and/or additional break time, etc.; the formal testing accommodation request process indicated previously must be followed.

Medicine and Medical Devices

- Arm/shoulder sling
- Bandages
- Braces – neck, back, wrist, leg, or ankle
- Casts/cervical collar
- Cough drops (must be unwrapped and not in a bottle/container)
- Earplugs (foam with no strings)
- EpiPen
- Eye drops
- Eye patches
- Eyeglasses (without a case)
- Glucose monitor
- Glucose tablets
- Handheld magnifying glass (non-electric, no case)
- Ice packs/Non-electrical heating pads
- Inhaler
- Medical alert bracelet
- Medical masks
- Medical rubber gloves
- Nitroglycerin tablets
- Pillow/lumbar support
- Pills (must be unwrapped and not in a bottle/container). Candidates may bring pills that are still in the packaging if the packaging states they **MUST** remain in the packaging, such as nitroglycerin pills that cannot be exposed to air. (Packaging will be inspected by test center administrators and a Center Problem Report will be submitted.)

- Stool for elevating a limb
- Surgical facemask
- Walking boot casts

Medical Devices (Attached to a person's body)

- Catheter
- Ostomy bag/appliance
- Heart rate monitor
- Insulin pump
- Oxygen tank
- Spinal cord stimulator
- TENS units (Transcutaneous Electrical Nerve Stimulation) for nerve pain
- Urine drainage bag
- Continuous Glucose Monitor

Communication Aids

- Hearing aid/cochlear implant
- Vocal cord magnifiers

Mobility Devices

- Cane
- Crutches
- Walker
- Wheelchair

Other

- Service animal

Step 2: Scheduling an Exam Appointment

FEES AND PAYMENT OPTIONS

Payment by Credit Card

Payment must be made in your NCARB Record using VISA, MasterCard, or American Express.

Veterans Affairs Benefit

The ARE has been approved by the Department of Veterans Affairs and qualifies as an education benefit. U.S. military veterans may be eligible for payment assistance to take divisions of the ARE. Please contact your regional Veterans Affairs Office for further details regarding the program or visit the [Veterans Affairs website](#).

Exam Fees

United States, Canada (includes U.S. territories), and international locations:

- Cost of the ARE (six divisions): \$1,410
- Individual divisions: \$235
- Retakes: \$235

When you pay an exam fee in your NCARB Record, you will have one year from the date of payment to schedule an exam.

Refund Policy

Refunds of exam fees are not available.

\$50 Rebate for First Online Proctored Appointment

To help offset the cost of meeting the system requirements for testing via online proctoring (such as the external webcam), NCARB will provide all candidates who schedule their first online appointment with a \$50 e-gift card. Every ARE candidate is eligible to receive one rebate. This gift card will be issued automatically after a candidate schedules their first online proctored appointment. Candidates who do not schedule an online proctored appointment will not be eligible.

The gift card will be delivered to the email address on file in your NCARB Record.

Payment Discrepancies/Bad Debt

NCARB reserves the right to withhold test scores and suspend test-taking privileges until any outstanding debt or payment discrepancies are resolved.

RESCHEDULE EVENT (Business days before scheduled appointment*)	RESCHEDULE FEE (to be collected by Prometric from candidates)
0-3 days	Rescheduling not permitted
4-15 days (Before Noon ET)	\$55
16-30 days (Before Noon ET)	\$40
30+ days (Before Noon ET)	No charge

*Saturday and Sunday are not considered business days. Here are two examples of rescheduling an in-person appointment four business days out. Remember to reschedule your in-person appointments before noon ET.

SUN	MON	TUE	WED	THU	FRI	SAT
	Example 1 Reschedule before Monday at noon ET for a Friday exam appointment (\$55)	
			Example 2 Reschedule before Wednesday at noon ET ...			
		... for a Tuesday exam appointment (\$55)				

Coronavirus Update

All rescheduling fees are waived until January 1, 2021, to provide candidates flexibility in adjusting existing division appointments.

Step 2: Scheduling an Exam Appointment

PREPARING FOR ONLINE PROCTORED EXAM

In preparation for an online proctored exam, you'll need to review the requirements established by both Prometric and NCARB. By scheduling a division of the ARE in this delivery setting, you are acknowledging that your system and testing environment meet all technical requirements and policies.

If you believe that you can't meet these requirements for online proctoring, please consider testing in-person at a physical test center.

PROMETRIC REQUIREMENTS

Prior to scheduling an online proctored exam, please read and understand the requirements and policies within the [Prometric ProProctor User Guide](#). This document outlines the following content:

- **System requirements** to run the ProProctor software, including a link to perform a System Readiness Check. This check typically takes 2-3 minutes. When you run the check, please try to replicate the conditions under which you expect to take your test. Use the same computer, at the same time of day, in the same room, and with the same setup.
- Launching an exam
- Check-in procedures
- Environmental requirements, including the dos and don'ts of setting up an online proctored workspace
- Prohibited items
- Candidate conduct

NCARB REQUIREMENTS

In addition to the requirements provided in the ProProctor User Guide, NCARB has established the following system requirements to optimize the delivery of the ARE:

System Requirements

- **Computer:** Laptop or desktop computer in a single monitor configuration. Tablets and touchscreen monitors are not acceptable. Tablet/laptop hybrids must be configured in laptop mode with tablet mode disabled. All cables connected to the computer and/or peripheral devices must be accessible and visible for full inspection prior to testing.
- **Laptop Setup:** Laptops are required to be plugged directly into a power source and unattached from a docking station. If you wish to use a single external monitor configuration with your laptop, connect a computer monitor cable directly from your external monitor to your laptop and close the laptop screen. You will not be able to use the laptop's integrated keyboard or trackpad.
- **Webcam:** External webcam with the flexibility and cord length to provide a 360° view of your testing environment including under your workstation and behind any monitor. Integrated webcams are NOT acceptable. To help offset the potential cost of purchasing an external webcam, NCARB is offering all candidates a one-time, \$50 e-gift card the first time they schedule an online appointment. See [page 12](#) for more information.
- **Keyboard:** Laptop or external keyboard. If you use a wireless keyboard, ensure the batteries are fully charged and can last for the duration of the exam.

Step 2: Scheduling an Exam Appointment

NCARB REQUIREMENTS (CONTINUED)

- **Mouse:** Laptop trackpad or mouse. If you use a wireless mouse, ensure the batteries are fully charged and can last for the duration of the exam.
- **Monitor:** Graphics and text on the ARE are designed for a single 19-inch or larger monitor displaying at 1920 x 1080 resolution. Smaller monitors and monitors at lower resolutions will reduce image clarity and necessitate additional scrolling throughout your exam.
- **Internet Speed:** A minimum of 3 mbps of dedicated bandwidth. Make sure there is no additional load (video streaming, gaming, music, etc.) on your internet connection during your exam administration. Consider scheduling your exam at a time when other individuals in your household/secure testing location will not be online.
- **Internet Connection Type:** An ethernet cable connected directly to your router is recommended for an optimal ARE experience. If using a wi-fi connection, ensure you have a strong signal throughout your exam administration. You are responsible for ensuring internet connectivity.

IMPORTANT NOTE ON ONLINE PROCTORED EXAMS

As an online tester, you take full responsibility for ensuring your setup meets the requirements for online proctoring. This includes integrity of equipment, internet connectivity, system performance or other issues related to but not limited to the above that are outside of the control of NCARB, Prometric, or NCARB's other test delivery vendors.

NCARB staff is not able to provide technical support regarding individual setup for online proctored delivery. Prior to your testing day, review the [Prometric ProProctor User Guide](#), including the technical information in [Prometric's ehelp website](#). If you are using a computer issued by your workplace or a personal computer with antivirus software, please note the General Instructions for Corporate Computers.

Step 3: Taking the ARE

DURING YOUR APPOINTMENT

When you arrive at the test center or online exam check-in, you are required to present a proper form of identification as outlined below. You will not be admitted to the examination without proper identification, and there will be no refund of your test fee. The primary form of identification must bear your signature and a recent photograph. The first and last name on the identification must be the same as the first and last name that appears in your NCARB Record. If you need to change the name shown in your NCARB Record, you must send a request and official documentation to [NCARB Customer Relations](#). **Name discrepancies must be resolved at least seven (7) business days prior to your scheduled exam appointment.**

Primary Identification Requirements

Primary identification must be from the following list and must include your signature and a recent recognizable photograph. This ID must be current (not expired).

- Valid driver's license with photo
- Military identification card with photo
- National identification card with photo
- Valid passport with photo

Alternate Identification Requirements

If you cannot present one of the primary IDs listed or your primary ID does not contain both a photo and your signature, you must present two forms of identification from the following list (not expired), ONE of which must contain a recent recognizable photo and ONE of which must contain your signature.

- Valid driver's license
- Military identification card
- National identification card
- Valid passport
- Student identification card
- State/province identification card
- U.S. passport card

Unacceptable Forms of Identification

- ID with no photo (unless accompanied by another form of ID with photo)
- Expired driver's license or passport
- Draft classification card

- Letter of identity from a notary
- Social Security card
- Credit card or bank card of any kind
- Employee identification

If the test center administrator or online proctor questions the ID presented, you may be asked for additional proof of identity. You may be refused access to an examination if the test center staff or online proctor believes you have not sufficiently proven your identity. You will not be admitted to the examination without proper identification and there will be no refund of your test fee. Admittance to the test center/online exam portal and completion of your examination does not imply that your identification is valid or that your score will be reported.

Please Note: In light of the COVID-19 pandemic, Prometric has instituted new policies and procedures to increase safety. Please review this information on [Prometric's website](#).

TIPS

- Verify that the first and last name in your NCARB Record is accurate and matches the first and last name printed on your identification. If your name is incorrect, immediately contact [NCARB Customer Relations](#).
- When you arrive at the test center or online exam check-in, you are required to present an approved form of identification.
- The first and last name on the ID must match the first and last name in your NCARB Record.
- You will not be admitted to the examination without the proper form of ID, and there will be no refund of your test fee.

Step 3: Taking the ARE

IN-PERSON EXAMS

The staff at each test center will guide you through designated procedures to ensure that the operation of the test center meets NCARB criteria.

1. You should arrive at the test center at least 30 minutes before your scheduled appointment. If you arrive later than 15 minutes after your scheduled appointment time, you may be required to forfeit your appointment and your test fee will not be refunded.
2. Your test session should begin within 30 minutes of your scheduled appointment. If circumstances arise that delay your test session more than 30 minutes after your scheduled appointment time, you will be given the choice of continuing to wait or rescheduling your appointment.
3. You are required to present proper identification. You must keep your identification with you at all times.
4. Prometric requires all candidates at test centers to be scanned by a metal detector prior to each entry into the testing room, including returns from breaks. All candidates will be required to submit to the scans, with few exceptions. Candidates refusing to be scanned may not be permitted to test.
5. In addition, NCARB requires mandatory biometric-enabled check-in procedures that include:
 - A scan of a candidate's photo ID
 - A test-day photo
6. You will be escorted to a workstation by the test center administrator. You must remain in your seat during the examination, except when authorized to leave by test center staff.
7. Each division includes a total amount of break time, which may be used all at once or split into multiple breaks throughout your test until you have used up the allotted time. If you need additional breaks beyond your allotted time, you may take a break, but the exam timer will continue to count down. You are required to click the on-screen Break tool anytime you take a break from your exam; failure to do so may result in your exam being terminated. When you return from a break, all items that you have already viewed will be locked, including those marked for later review, and you will not be able to view or edit them again. You must comply with all re-admittance procedures each time you return from a break.
8. You will have access to an onscreen electronic whiteboard during your test. You are not allowed to bring your own scratch paper or pencils into the testing room at a test center.
9. Raise your hand to notify the test center administrator if:
 - a. You experience a problem with your computer
 - b. An error message appears on the computer screen (**do not clear the message**)
 - c. You need the test center personnel for any other reason
10. In the event that a software or hardware problem occurs before or during your test, please see [page 20](#) for additional information.

Step 3: Taking the ARE

IN-PERSON EXAMS (CONTINUED)

11. If you leave the testing room for any reason, you are required to follow all Prometric security procedures to check out and later check back in to the test session.
12. When you finish the examination, quietly leave the testing room and sign the test center registration log. The test center administrator will dismiss you after completing all necessary procedures.

Prometric has implemented security procedures that will help prevent the use of small recording devices. Be advised:

- All candidates will be required to remove their eyeglasses for visual inspection.
- Most types of jewelry are prohibited, with the exception of wedding or engagement rings.
- Other accessories are subject to inspection.

Provisional Feedback

You will have the option to view provisional feedback of your performance at the end of your exam. If you do not view the provisional feedback at that time, your official score report will be processed and made available to you within one week of your test date.

Please note: Provisional feedback will be unavailable for all ARE candidates for approximately four weeks after the launch of online proctoring, while NCARB establishes a new cut score.

Step 3: Taking the ARE

ONLINE-PROCTORED EXAMS

The online Readiness Agent and Proctor will guide you through designated procedures to ensure that the operation of the online portal meets NCARB criteria.

1. You should log in 30 minutes before your scheduled online proctored appointment. If you log in later than 15 minutes after your scheduled appointment time, you may be required to forfeit your appointment and your test fee will not be refunded.
2. Your test session should begin within 30 minutes of your scheduled appointment. If circumstances arise that delay your test session more than 30 minutes after your scheduled appointment time, you will be given the choice of continuing to wait or rescheduling your appointment.
3. You are required to present proper identification. You must keep your identification with you at all times.
4. Prometric requires all online proctored candidates to complete the check-in process each time they access their test, including returns from breaks. Candidates refusing to provide a 360° view of their testing environment using their webcam may not be permitted to test.
5. In addition, NCARB requires mandatory biometric-enabled check-in procedures that include:
 - A scan of a candidate's photo ID
 - A test-day photo
6. After you check-in with the Readiness Agent, you will start your exam monitored by a Proctor through your webcam. You must remain in your seat and in the camera view unless you are taking a break from testing.
7. Each division includes a total amount of break time, which may be used all at once or split into multiple breaks throughout your test until you have used up the allotted time. If you need additional breaks beyond your allotted time, you may take a break, but the exam timer will continue to count down. You are required to click the on-screen Break tool anytime you take a break from your exam; failure to do so may result in your exam being terminated. When you return from a break, all items that you have already viewed will be locked, including those marked for later review, and you will not be able to view or edit them again. You must comply with all re-admittance procedures each time you return from a break.
8. You will have access to an onscreen electronic whiteboard during your test. You are not allowed to have scratch paper or pencils in your workspace during an online proctored test.
9. Use Prometric's onscreen tool to speak with or message your online proctor if:
 - a. You experience a problem with your computer
 - b. An error message appears on the computer screen (**do not clear the message**)
 - c. You need a proctor for any other reason
10. In the event that a software or hardware problem occurs before or during your test, please see [page 20](#) for additional information.

Step 3: Taking the ARE

ONLINE-PROCTORED EXAMS (CONTINUED)

11. If you leave the secure testing area for any reason, you are required to follow all Prometric security procedures to check out and later check back in to the test session.
12. After you finish an online proctored examination, you'll simply close out of the Prometric application.

Prometric has implemented security procedures that will help prevent the use of small recording devices. Be advised:

- All candidates will be required to remove their eyeglasses for visual inspection.
- Most types of jewelry are prohibited, with the exception of wedding or engagement rings.
- Other accessories are subject to inspection.

Provisional Feedback

You will have the option to view provisional feedback of your performance at the end of your exam. If you do not view the provisional feedback at that time, your official score report will be processed and made available to you within one week of your test date.

Please note: Provisional feedback will be unavailable for all ARE candidates for approximately four weeks after the launch of online proctoring, while NCARB establishes a new cut score.

Step 3: Taking the ARE

REPORTING TEST CONCERNS

DO NOT wait to receive your test results before expressing your concerns. NCARB policy does not allow for response to complaints received more than 15 days following your test date. You must send your complaint to [NCARB's Customer Relations team](#).

PLEASE NOTE: The filing of a report by the test center administrator or online proctor does NOT satisfy the requirements of notifying NCARB's Customer Relations team directly.

Comments and Questions About Your Exam Administration

If you have any comments or questions concerning your exam administration, direct your comments in writing to [NCARB's Customer Relations team](#) within 15 days following your test administration.

Inquiries About Specific Exam Questions

NCARB employs extensive quality control procedures throughout the development of the ARE.

In spite of these procedures, typographical errors or flawed questions may be encountered on rare occasion. If you suspect an error in a specific question, write to [NCARB's Customer Relations team](#) immediately after taking the test. In your correspondence, include:

- The name of the division
- The test date
- The specific concern(s) about the question

You are not permitted to copy the question before leaving the test center or during an online proctored test and are not expected to recreate the entire question in your correspondence. NCARB will review the question, and you will be notified of the findings. The correct answer will not be revealed.

Step 3: Taking the ARE

REPORTING TEST CONCERNS (CONTINUED)

Technical Difficulties at the Test Center

In the event that a software or hardware problem occurs before or during your test, please wait to see if the test center administrator, with assistance from Prometric technical support, can resolve the problem. In the event a computer must be restarted, the exam delivery software has been designed to suspend testing time until the computer is operating again.

If your examination cannot be administered because of technical difficulties, your examination will be rescheduled at your earliest convenience. If rescheduling your examination is necessary, you may be eligible for limited compensation from Prometric for incidental expenses such as transportation, parking, or meals. Lost wages or hourly fees are NOT compensated under this policy. If any exam content was delivered to you prior to the technical difficulty, standard retake time frames will apply.

Technical Difficulties During Online Proctored Delivery

In the event that an exam delivery problem occurs before or during your test, please wait to see if the online proctor, with assistance from Prometric technical support, can resolve the problem. In the event a computer must be restarted, the exam delivery software has been designed to suspend testing time until the computer is operating again.

If your examination cannot be administered because of technical difficulties due to NCARB's test delivery vendor, your examination will be rescheduled at your earliest convenience. If your examination cannot be administered because of technical difficulties due to your computer, mouse, keyboard, internet connection, or any other personal technology/equipment, testing fees cannot be refunded. You will need to purchase a new seat credit and schedule a new appointment for the division at a later date. If any exam content was delivered to you prior to the technical difficulty, standard retake time frames will apply.

For both test center and online proctored delivery, details can be found [here](#).

Tips

Guessing

You should answer every question presented. If you are not sure of the correct answer, make your best guess and/or mark the question for later review. All unanswered questions will be counted as incorrect responses.

Personal Calculators

ARE candidates are not permitted to bring a personal calculator into the test center or secure testing area. All divisions of the ARE include an on-screen scientific calculator for your use.

What to Expect

To learn more about what to expect at a Prometric test center, [click here](#).

Step 3: Taking the ARE

REPORTING TEST CONCERNS (CONTINUED)

Rescheduling When Test Center is Closed

In the event your test center is closed during your scheduled appointment time, you will be contacted by Prometric to assist you with rescheduling your exam as follows:

1. You will receive a phone call from Prometric within 24 hours of your test center closing to reschedule your exam.
2. If you miss this phone call, you will automatically be rescheduled at no charge for the next available slot at a test center near you. You will receive an email and automated phone call from Prometric notifying you of the new appointment time.
3. If you are unable to make the automatically rescheduled appointment time, you must call Prometric's Customer Care line at 1-800-853-6769 to reschedule your exam at no cost. When speaking with the Prometric representative, you must mention that you need to reschedule your automatically rescheduled appointment because of a test center closure. You may not reschedule your appointment through your NCARB Record in this circumstance.

Test Center Closings

If you are unsure whether a test center is closed due to inclement weather or any other reason, you should contact the test center directly. If the center is open, it is your responsibility to keep the appointment. If the center is closed, you will be given the opportunity to reschedule.

Step 3: Taking the ARE

TESTING REGULATIONS

To ensure that all ARE divisions are administered under comparable conditions to that of other candidates, and that the results represent a fair and accurate measurement, it is necessary to maintain a standardized testing environment. You must adhere to the following regulations:

- Cell phones, calculators, and smart watches or devices are not allowed in the testing room or secure testing area.
- Use of tobacco is not allowed in the test center.
- Papers, books, food, purses, or wallets are not allowed in the testing room or secure testing area.
- At the test center, you may not leave the testing room without the test center administrator's permission. During online proctored delivery, you may not leave the secure testing area without first selecting the onscreen break option.
- At the test center, you must present your identification, sign a logbook, and be scanned by a metal detector to be readmitted to the testing room. During online proctored delivery, you must present your identification and show your workstation and surrounding area to regain access to your test.
- No reference materials may be brought into the testing room or secure testing area.
- Leaving the testing center anytime during your exam administration (including breaks) is strictly prohibited.

You are required to leave all personal belongings outside the testing room. Candidates will not be allowed to take anything into the testing room other than those items given to them by the test center administrator (such as earplugs), and their identification documents (e.g., driver's license, passport).

Small lockers are provided at test centers for candidate use to secure purses, wallets, keys, cell phones, pagers, etc. Lockers will NOT accommodate briefcases, laptop computers, or large purses and bags. Do not bring large items (bags, textbooks, notebooks, etc.) to the testing center. Test center staff will not take responsibility for these items; you will be asked to remove large items from the testing center.

For an online proctored appointment, your secure testing area must be free of any personal items that may present an unfair advantage. Refer to the [Prometric ProProctor User Guide](#) for additional information.

Grounds for Dismissal

An examinee who engages in misconduct, unprofessional behavior, and/or does not heed the administrator's or proctor's warning to discontinue inappropriate behavior may be dismissed from the test center or online proctored test session, and/or have examination results cancelled, and/or have examination eligibilities suspended. Examples of misconduct include:

- Failing to follow the instructions of the test center administrator or online proctor.
- Violating the test center or online proctored testing regulations.
- Creating a disturbance of any kind.
- Removing or attempting to remove examination questions and/or responses (in any format) or

notes about the examination from the testing room or secure testing area.

- Attempting to take the examination for someone else.
- Tampering with the operation of the computer or attempting to use it for any function other than taking the examination.
- Leaving the testing room or online camera view without permission.
- Using any unauthorized references or devices.

Please Note: Accessing inappropriate materials during the test duration may result in the invalidation of your exam score and no refund for the administration will be given.

Step 3: Taking the ARE

EXAM SECURITY

To ensure the integrity of the ARE program, specific security measures are enforced during the administration of your examination.

You will be observed at all times while taking the examination. This may include direct observation by test center staff or online proctors, as well as audio and video recording of your examination session.

Waiting areas at the test center are for candidates only. Friends or relatives who accompany you to the test center will not be permitted to wait in the test center or contact you while you are taking the examination. During an online proctored test, friends or relatives are not permitted to contact you or enter your secure testing area.

Confidentiality Agreement

All NCARB tests are held in strict security and confidence. Disclosure of exam content is prohibited. You will be required to acknowledge that you have read, understand, and accept the [ARE Candidate Agreement](#) prior to beginning your exam.

By taking divisions of the ARE, you are personally responsible for maintaining the confidentiality of all information relating to the exam. You may not discuss exam content in any manner with anyone, including but not limited to family, friends, other examinees, and test preparation providers. This agreement also covers Internet chat rooms, mailing list servers, websites, etc. Following completion of your exam, you will also be reminded of your acceptance of the Confidentiality Agreement that you acknowledged prior to commencing the exam.

Any disclosure of ARE content is strictly prohibited and may result in severe disciplinary action, including the suspension of testing privileges and/or the cancellation of scores.

ARE Candidate Agreement

Amended January 2019

You must accept the ARE Candidate Agreement within the allotted time in order to test today.

I affirm that the information given in my NCARB Record is true, correct, and complete to the best of my knowledge. By clicking "I Accept", I agree to abide by the following terms and am entering into a binding agreement ("Agreement") between me and the National Council of Architectural Registration Boards (NCARB).

- I have READ, UNDERSTAND, and AGREE TO ABIDE BY the Architect Registration Examination (ARE®) policies and regulations or set forth in the ARE Guidelines ("ARE Policies and Regulations"). Further, I ACKNOWLEDGE and AGREE that NCARB reserves the right to modify or alter at any time any rules, policies or provisions set forth in the ARE Policies and Regulations, which revisions or modifications shall be binding upon me.
- I UNDERSTAND that disciplinary action for violation of this Agreement and/or the ARE Policies and Regulations may include, without limitation, suspension of my ARE test taking privileges, cancellation of my ARE scores, and/or my potential inability to obtain future NCARB Certification or to become registered as an architect.
- I AGREE that I will always conduct myself professionally and carry on in the testing center. I will follow instruction given by the test center staff, and I will act in an honest and reasonable manner.
- I UNDERSTAND that all content of the ARE is confidential, the property of NCARB, and protected by US copyright law.
- I AGREE that I will not copy or attempt to reproduce ARE content for my own later use.
- I AGREE that I will not disclose to anyone by any means - electronic, written, graphic or verbal - the substance or details of any ARE content, including but not limited to exhibits, resources, graphics and/or alleged answers.
- I AGREE that I have not obtained, nor will I seek to obtain, ARE content disclosed by others.
- I AGREE to notify NCARB if I believe I have received exam content by any means of communication.
- I AGREE that I will not disclose or disseminate ARE content that others may have disclosed to me.
- I AGREE that any action to enforce this Agreement, the ARE Policies and Regulations, and/or any action for infringement of NCARB's copyright of the ARE may be commenced in or transferred to the United States District Court for the District of Columbia, which NCARB's principal office is located, which currently is the District of Columbia, and I hereby consent to the personal jurisdiction of such court. Further, I AGREE that the validity, interpretation and performance of this Agreement shall be governed by and construed in accordance with the laws of the District of Columbia.
- I UNDERSTAND that a violation of this Agreement or the ARE Policies and Regulations may result in my civil liability to NCARB for its costs and monetary damages, which may be substantial, as well as disciplinary actions taken against me by NCARB.
- I UNDERSTAND that a violation of this Agreement or the ARE Policies and Regulations may result in notification to the regulation Board responsible for my examination eligibility, which may lead to further disciplinary action by such Board.
- I HEREBY RELEASE, DISCHARGE AND HOLD HARMLESS INDIVIDUALLY AND COLLECTIVELY NCARB AND ITS OFFICERS, DIRECTORS, EMPLOYEES, MEMBERS, VOLUNTEERS, SUBSIDIARIES, AGENTS, SUCCESSORS, AND ASSIGNS, INCLUDING MEMBERS, EMPLOYEES, AND AGENTS OF NCARB, FROM ANY AND ALL CLAIMS OR LIABILITY THAT MAY ARISE, DIRECTLY OR INDIRECTLY, NOW OR IN THE FUTURE, BY REASON OF OR IN CONNECTION WITH ANY DECISION, ACTION, OR OMISSION RELATING TO NCARB'S ADMINISTRATION OF THE ARE.

☐ I ACCEPT

Step 4: Receiving Your Score

SCORE REPORTING

All divisions of the ARE are administered and graded by computer on a pass/fail basis. Keep in mind that:

- **Test Results are not released at the test center or during online proctored delivery.** Results for all divisions are typically processed within one week of your test date.
- NCARB's first priority is to ensure that all examinations are scored fairly and accurately. While every effort is made to process examination scores in a timely manner, it is more important that no errors are made in the score-reporting process.
- You will be notified via email when your score has been processed and is available to you. Once available, you will be able to access your score report online via your NCARB Record.

Sharing Your Score

NCARB recognizes your rights to control any personal information that we (or our third-party service providers) maintain. Our policy is designed to safeguard this information from unauthorized disclosure. To protect your rights to control score distribution, NCARB will only release your score reports under two circumstances:

1. **NCARB will release your score reports to the board of architecture for which you are being tested.**
A board of architecture may reserve the right to cancel one or more of your test scores, if, in its sole opinion, there is any reason to question its validity.
2. NCARB may release test scores for use in research studies or under compulsion of legal processes. In the case of research studies, NCARB will ensure that your anonymity is preserved.

The Passing Standard

Passing or failing the ARE depends solely on your level of performance in relation to the established point representing entry-level competence. Careful judgment has been exercised in setting the passing standards for all NCARB examinations. The passing scores are the same for every board of architecture and are not affected by the number of people who pass or fail each division of the examination. There is no fixed percentage of candidates who pass or fail the ARE.

Step 5: Retaking the ARE

AFTER AN UNSUCCESSFUL ATTEMPT

In the event you do not pass a division of the ARE, a new eligibility to test on that division will be created based on the rules of your jurisdiction. Failing score reports will contain descriptive feedback on page two of the score report identifying areas of relative strength and weakness. Options are available to candidates wanting to receive additional verification of their performance.

Candidates can retake a failed division of the ARE as soon as 60 days after the previous attempt of that division. A candidate may only take the same division of the ARE three (3) times within any 12-month time frame.

Score Verification

Any candidate can request a score verification. A score verification will involve the review of your performance on all questions by NCARB staff. The process will verify that the score and descriptive feedback reported accurately represented your performance on the division.

A candidate can request a score verification of a failed division up to 60 days from the date of the administration. A score verification can be requested by contacting [NCARB Customer Relations](#). The fee for a score verification is \$100. In the event that it is found that the score or descriptive feedback reported to the candidate was not accurate, the score verification fee will be refunded.

Step 5: Retaking the ARE

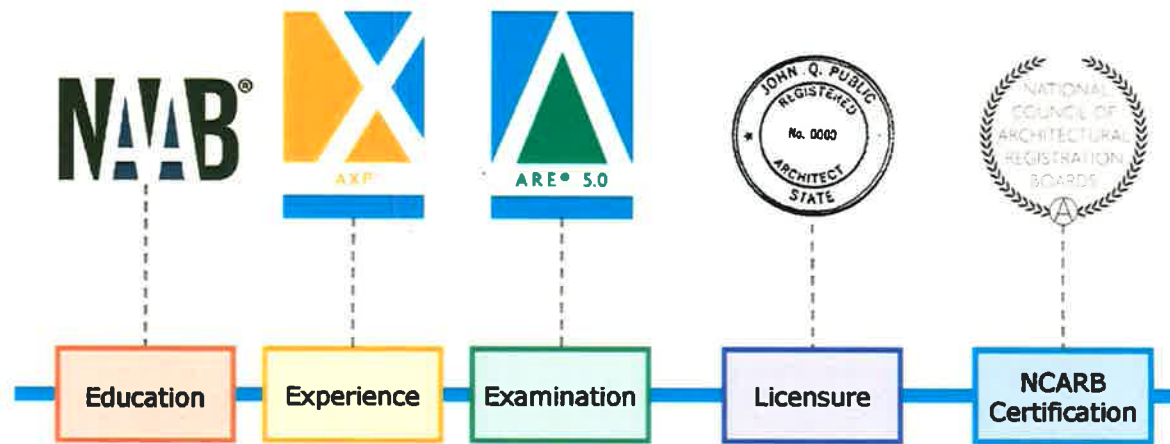
REVIEW AND CHALLENGE

You may only initiate a review process if your board of architecture permits reviews of failed examinations. It is at the sole discretion of each board of architecture whether or not to administer the review process.

If you wish to pursue the review process, keep in mind the following information:

- **Immediately contact your board of architecture to better understand the procedures and fees involved.** NCARB charges a \$300 fee to review a failed exam. Your board may charge additional fees. The application for review and the review fee must be received by NCARB within four months of the administration of your test, and the review process must be completed within six months of your test date.
- Only those questions you answered incorrectly can be reviewed. The correct answer or proper response will not be revealed.
- You may only challenge a question answered incorrectly if your board of architecture allows challenges and appeals. Your challenge will be forwarded to NCARB for review and response.
- **NCARB Review:** If there is a successful challenge to a question/s on your exam that has been determined by NCARB through the NCARB-facilitated review/challenge process to change your score from fail to pass, NCARB will recognize the new score for the purpose of NCARB certification.
- **State Review:** If your board of architecture (or a court with jurisdiction) changes your score from fail to pass outside of the NCARB-facilitated review/challenge process, **ONLY** that jurisdiction is required to accept the new score, and NCARB will not recognize the new score for purposes of NCARB certification.

NCARB Certification – Standard Path

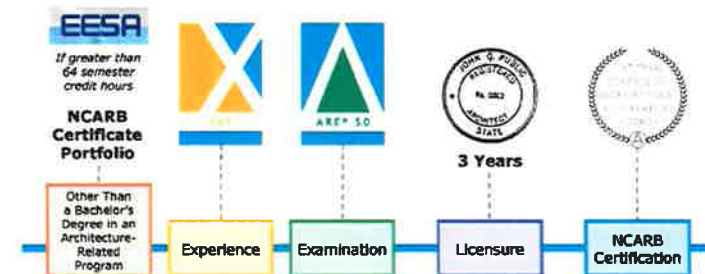


Education Alternatives

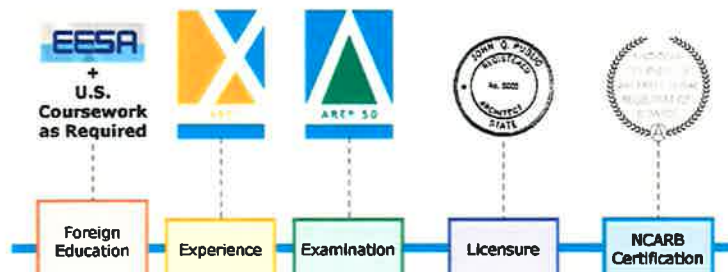
4 yr Arch Related Degree



Other than 4 yr Arch Degree



Foreign Education



Sent: Wednesday, September 23, 2020 3:55 PM
To: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: NCARB Eliminates Scrap Paper on the ARE Exam

Dear Rebecca,

My name is Arielle Lapp. I am a licensure candidate and I am **extremely concerned with the testing changes** NCARB is implementing. NCARB released [a statement](#) yesterday announcing that they are going to **remove candidate's access to scratch paper and a pen while taking the AREs. Additionally, candidates will not be able to revisit material after their floating 15 minute break.** This applies to both [in-person](#) and [remote](#) testing starting November 16th. Beta testing for in-person exams without scratch paper is expected to commence in mid-October.

The ability to jot down notes for complex code questions and multi-step mathematical equations **is critical to passing all six divisions.** Sketching to visualize a concept such as deflection, moment, and shear of a simply supported beam is the way in which designers generally think through the problems. Pen and paper are the tools of our trade. While I understand the need for exam security, depriving test-takers of the tools required to pass the exam adds another hurdle to exams with [pass rates](#) already as low as 47%.

The floating break allows candidates to drink water, grab a snack, and use the facilities when they need to. It also allows nursing mothers to take the time required to pump. I am not a mother, but I imagine this bodily function doesn't always happen according to a timer. One could take the break 20 minutes after the exam started, but prior to completing their multiple choice questions. In practice, ARE candidates often review questions they marked incomplete prior to moving on to the Case Studies. **I believe this is coming from a place of concern about cheating.** The ARE questions are structured in such a way that it is nearly impossible to cheat. This attempt to curb potential cheating is paranoid and out of touch. **It assumes that all ARE candidates are acting in bad faith** from the start, rather than recognizing that this is a cohort of designers who are diligently working to jump through the hurdles required to attain licensure.

NCARB's stated mission is *"helping licensure candidates and architects reach their career goals."* This action accomplishes the opposite. Instead of paper, NCARB mentions a digital whiteboard. Technical glitches aside, toggling between the whiteboard and the exam questions will take away precious time from answering the questions. This is an inadequate substitution. The testing software is rife with glitches, shutdowns, and other technical issues. The screen was flickering for the entirety of the last two ARE 5.0 exams I took. Another exam that I took in ARE 4.0 shut down between the multiple choice and vignettes and I had to retake it. Other tests for professional licensing exams make use of alternative solutions including laminated paper and a dry erase marker (physical whiteboard.) A digital whiteboard could provide an unfair advantage to those with access to the funds for a digital stylus. **Over 1,200 test takers have signed a [petition](#) against this move in the past 24 hours.** *Please listen to the licensure candidates' feedback.*

The exams are challenging enough as is, and the pass rates reflect that. Add in a pandemic, massive industry job loss, and remove the tools required to process the exam? Many people will

stop pursuing architecture in what is becoming an increasingly inequitable profession. More people will choose to forego licensure and its value will decrease over time. **We will have fewer licensed architects who are capable of protecting the health, safety, and welfare of the general public.**

Licensure candidates are diligent individuals who are continuously learning more about the profession and implementing those lessons in our respective offices. I am asking you to help preserve the minimum tools required to pass the exams. **Please help us communicate this issue to NCARB** as they have not been receptive to our collective feedback.

If there is anything I can do to help further communicate the situation please let me know. Any assistance on this matter is greatly appreciated.

Best,

Arielle Lapp
Associate AIA

Member Board ARE Online Proctoring Update: 9/24/2020

Earlier this week, NCARB shared a blog post that answered several frequently asked questions from candidates about our announcement related to online proctoring. It has generated a lot of discussion around the answer to one FAQ in particular: the decision to remove access to scratch paper for those taking the ARE in physical test centers beginning November 16.

Will I have access to scratch paper during my online-proctored exam?

Once the option for online proctoring launches on November 16, candidates testing online and in person will no longer have access to physical, paper-and-pencil scratch paper. Candidates will be able to use an online [whiteboard] option instead; more details regarding this tool will be available in October.

To help you answer candidate concerns, we have compiled some key takeaways and more in-depth information around this decision.

1. Scratch paper will be replaced with a digital whiteboard.

All the tools candidates need to complete the ARE will be provided, and we will ensure the whiteboard will be made available prior to launch so candidates can get comfortable with it before using it in a test center or online. Candidates will be able to test and get familiar with the new whiteboard tool when the new demonstration exam launches in mid-October.

2. Consistency and fairness for candidates whether they are testing online or in-person.

NCARB needs to ensure candidates have the same test experience whether they are online or onsite. NCARB does not want to introduce variance into the different testing modalities when the online proctoring option launches. One of the key factors in maintaining exam defensibility is to treat all candidates the same.

3. Security requirements for the online proctored exam.

The replacement of scratch paper follows best practices in testing by ensuring there is a “clean desk” for exam security purposes. This is also part of the transition to online proctoring, because it is more difficult to monitor the use and disposal of loose paper when candidates are testing remotely as opposed to in a test center.

4. NCARB did not make this decision lightly.

While the current pandemic has moved up NCARB’s timeline to release the online proctored version of the exam, this has been something our Board of Directors and Examination Committee has been considering and evaluating for years. As the ARE is a standardized test all NCARB’s Member Boards accept as part of evaluating competency to earn a license, making sure the exam is delivered in a secure and consistent manner is our top priority. To meet those goals, items like scratch paper were identified and discussed early in the process of understanding what it would take to allow the ARE to be delivered through online proctoring.

5. There are more policy and exam changes to be announced.

NCARB's intention is to provide Member Boards with advance notice of major changes we announce over the next two months. The Board of Directors is finalizing many of them at their September Board meeting, and boards will receive notice of upcoming changes to the number of questions per division, test times of each division, and other policies shifts prior to their release to candidates.

YOUR GUIDE TO Online Proctoring and ARE 5.0



NCARB

TABLE OF CONTENTS

INTRODUCTION	3
EXAM CHANGES	4
Items Per Division Will Be Reduced	4
Test Duration Per Division Adjusted Slightly	5
Optional Break Time Expanded; Items Locked When a Break is Taken	6
NCARB Will Set New Cut Scores	7
Reduced Rescheduling Fees in Effect on January 1	7
Updated Guidelines and Handbook Available Now	8
Updated Exam Candidate Conduct Policy	9
Digital Whiteboard Will Replace Physical Scratch Paper	9
Other Changes While Testing	10
Not All Accommodations Will Be Available for Online Proctoring	10
Exam Delivery Moving to PSI in Summer 2021	11
ONLINE PROCTORING SETUP REQUIREMENTS	12
Systems Requirements	12
Environmental Requirements	14
HOW NCARB DEVELOPS EXAM CHANGES	15
ARE Timeline	16
FAQS	17

INTRODUCTION

The option for candidates to take the Architect Registration Examination® (ARE®) via online proctoring will be offered in addition to traditional, in-person testing, which will still be available through Prometric's global network of test centers.

To enable online proctoring while maintaining the exam's essential reliability and rigor as a measure of candidate competency, several changes to ARE 5.0's navigation, timing, and policies will go into effect when online proctoring launches. These changes will impact both in-person and online exams, including in-person exams already scheduled.

The following provides additional information about the changes to ARE 5.0. Keep in mind, the exam's overall content—including the division structure, item bank, and objectives—is not changing. While candidates should familiarize themselves with the updated demo exam when it launches mid-November, candidates do not need to alter the materials they're currently studying.



EXAM CHANGES

► Items Per Division Will Be Reduced

In an effort to continue to increase the efficiency of the licensure process, NCARB will reduce the total number of items candidates will see in each division of ARE 5.0.

Practice Management Original Number of Items 80 Updated Number of Items 65	Project Management Original Number of Items 95 Updated Number of Items 75
Programming & Analysis Original Number of Items 95 Updated Number of Items 75	Project Planning & Design Original Number of Items 120 Updated Number of Items 100
Project Development & Documentation Original Number of Items 120 Updated Number of Items 100	Construction & Evaluation Original Number of Items 95 Updated Number of Items 75

Key things to know:

- **The majority of items to be removed are “pre-test” items.** Each division of the ARE includes several “pretest” items—new items in the testing stage of development. These items are indistinguishable from regular items, but do not contribute to the candidate's score. To reduce the exam's length without impacting rigor, there will be less pretest items per division of the ARE.

- **Reducing the number of items per division will not make the exam easier**

Reducing the length of the test is based upon recommendations from NCARB's independent psychometricians, but the changes will not impact the exam's difficulty. NCARB will establish a new cut score to ensure the ARE is a fair test of competency.

► Test Duration Per Division Adjusted Slightly

Changes in the number of items per division will not have a significant impact on exam timing as **candidates are being given more time per item on each division and more break time per division.**

Practice Management PcM Original Appointment Time 3 HR 30 MIN Original Test Duration 2 HR 45 MIN Updated Appointment Time 3 HR 20 MIN Updated Test Duration 2 HR 40 MIN	Project Management PjM Original Appointment Time 4 HR Original Test Duration 3 HR 15 MIN Updated Appointment Time 3 HR 40 MIN Updated Test Duration 3 HR
Programming & Analysis PA Original Appointment Time 4 HR Original Test Duration 3 HR 15 MIN Updated Appointment Time 3 HR 40 MIN Updated Test Duration 3 HR	Project Planning & Design PPD Original Appointment Time 5 HR Original Test Duration 4 HR 15 MIN Updated Appointment Time 5 HR Updated Test Duration 4 HR 5 MIN
Project Development & Documentation PDD Original Appointment Time 5 HR Original Test Duration 4 HR 15 MIN Updated Appointment Time 5 HR Updated Test Duration 4 HR 5 MIN	Construction & Evaluation CE Original Appointment Time 4 HR Original Test Duration 3 HR 15 MIN Updated Appointment Time 3 HR 40 MIN Updated Test Duration 3 HR

Key things to know:

- **Candidates will have more time per item.** Because the reduction in the number of items is proportionally larger than the reduction in test time, candidates will have more time to consider each item.
- **Timing considers the changes to navigation and tools.** The additional time in relation to the number of items gives candidates the necessary flexibility to review items and use updated tools, such as the digital whiteboard.



► Optional Break Time Expanded; Items Locked When a Break is Taken

Candidates' optional break time will be expanded to 30 or 45 minutes, depending on the division. In addition, candidates will be able to use this time for multiple short breaks or one long break during their appointment.

Candidates will be able to review any previously viewed items before they take a break. **However, upon returning from a break, candidates will be unable to review or edit items seen prior to a break.** Those items will be locked for the duration of the test appointment. Candidates are required to click the on-screen break tool anytime they take a break.

Division	Optional Break Time
Practice Management PcM	30 MIN
Project Management PjM	30 MIN
Programming & Analysis PA	30 MIN
Project Planning & Design PPD	45 MIN
Project Development & Documentation PDD	45 MIN
Construction & Evaluation CE	30 MIN

Key things to know:

- **Candidates will have more break flexibility.** The new break structure allows candidates more flexibility in terms of when and for how long to take a break, both in-person and when testing online.
- **Locking items after breaks is essential for exam security.** Because NCARB will not control the break activities of candidates who test via online proctoring, locking items maintains the exam's security.
- **Candidates should plan to review items before taking a break.** Candidates will be able to review any previously viewed items before they take a break. Currently, many candidates choose to review "flagged items" at the end of their test appointment. Candidates should adjust their testing strategy to review any flagged items prior to taking a break, since they will be unable to return to these items.



► NCARB Will Set New Cut Scores

Because the number of scored items is changing, NCARB will have to set a new cut score for each ARE division. NCARB and our psychometrician experts will use current cut scores as a reference when setting the new cut scores—this will minimize the time needed to set cut scores and allow NCARB to benchmark the current exam rigor.

► Reduced Rescheduling Fees in Effect on January 1

NCARB has not charged rescheduling fees since the COVID-19 pandemic initially shut down test centers in mid-March. NCARB will reinstate fees for rescheduling exam appointments beginning on January 1, 2021. However, NCARB has reduced rescheduling fees.

Days Before Exam Appointment	Previous Fee	Updated Fee
0-3 BUSINESS DAYS	Rescheduling Not Permitted	Rescheduling Not Permitted
4-15 BUSINESS DAYS (before Noon ET)	\$80	\$55
16-30 BUSINESS DAYS (before Noon ET)	\$60	\$40
30 OR MORE BUSINESS DAYS (before Noon ET)	\$0	\$0

Key things to know about the cut score process:

- NCARB does not expect pass rates to change dramatically. The changes being made to enable online proctoring are not intended to make the exam easier or harder; therefore, pass rates for the updated exam are expected to align with current pass rates.
- Score reports will be held for approximately four weeks while cut scores are set. During this time, candidates will also be unable to see provisional feedback prior to leaving the test center or online appointment. Provisional feedback will return once the cut score is set. Score reports will be released by division, as the cut scores for each division are established.

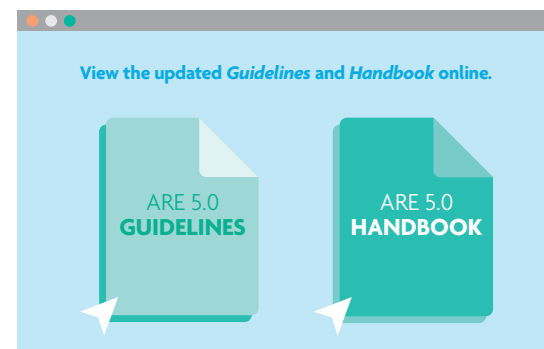
Key things to know about the reduction of rescheduling fees:

- Rescheduling fees apply to both online and in-person appointments.

► Updated *Guidelines and Handbook* Available Now

NCARB's updated *ARE 5.0 Guidelines* and *ARE 5.0 Handbook*—which apply to all exams scheduled on or after the launch date of the online proctoring option—are available now. The previous versions of these documents will remain available until the launch date of the online proctoring option. You can find both versions on NCARB's website at ncarb.org/onlineproctoring.

These documents outline changes to exam policy and exam navigation, including the updates to exam timing and items.



Key things to know:

- **The updated *ARE 5.0 Guidelines* includes the requirements for taking an online proctored exam.** These include both technical and environmental requirements from both NCARB and Prometric. Candidates are required to review and understand all requirements prior to scheduling an online proctored appointment.
- **The objectives outlined in the *ARE 5.0 Handbook* have not changed.** However, NCARB has added additional details about the relative percentage of the exam each objective comprises.
- **More resources available in mid-November.** The updated demo exam and exam prep videos will help candidates familiarize before the December launch.

In addition, both the *Guidelines and Handbook* have been updated to be more accessible and mobile-friendly.

► Updated Exam Candidate Conduct Policy

NCARB has modified the Exam Candidate Conduct policy to better reflect expectations in a dual-delivery (online proctored and in-person) world. The new policy is now in effect and available on the [NCARB website](#).

► Digital Whiteboard Will Replace Physical Scratch Paper

Candidates will still be able to take notes, outline potential solutions, and more using an online whiteboard option. More details regarding this tool, including the ability to become familiar with the tool via the Demonstration Exam in [My NCARB](#), will be available by mid-November at the latest.

Key things to know:

- **Candidates must have a consistent exam experience regardless of test delivery.** In order to maintain fairness across delivery modes, NCARB needs to ensure candidates are provided the same tools while testing, whether they are testing online or onsite. To launch online proctoring appropriately, NCARB will ensure consistent delivery tools for all candidates.
- **NCARB must ensure the security of exam content.** The ARE is an essential measure of candidate competency used by all 55 U.S. licensing boards. Allowing physical scratch paper for candidates testing via online proctoring would introduce a major security risk for exam content. It is more difficult to monitor the use and disposal of loose paper when candidates are testing from a remote location, as opposed to in a test center. Because of this, online proctoring cannot launch with the allowance of physical scratch paper.
- **A “clean desk” policy is recommended by testing experts.** The replacement of scratch paper follows best practices in testing recommended to NCARB by our psychometrician experts. Requiring a “clean desk” is the most reliable way to ensure that candidates are not violating the ARE Candidate Agreement. The desire to make online proctoring available may have moved the timeline for this decision forward, but it is not the only reason behind the change.



Your Guide To Online Proctoring and ARE 5.0

► Other Changes While Testing

To improve the candidate testing experience, NCARB has made changes to ARE 5.0's references, PDF reader, and some multiple-choice items.

- **References:** Structural resources or formulas needed to solve a particular item will be included in the item.
- **PDF Reader:** NCARB and our test development consultant are upgrading the PDF reader used for case studies to improve the candidate experience.
- **Multiple-choice items will include three or four response options.** Some multiple-choice items will only include three response options, while others will include the current four response options. This change eliminated easily dismissed response options that served no assessment value, and will ease some of the timing burden placed on candidates.
- **Candidate privacy will be maintained.** Similar to the ARE's content, personal information, recorded sessions, and other sensitive data are stored securely on Prometric's advanced network.

► Not All Accommodations Will Be Available for Online Proctoring

NCARB offers testing accommodations for candidates with documented disabilities and temporary medical conditions. The process to apply for accommodations will not change with the launch of remote proctoring.

Key things to know:

- **Not all accommodations will be available via online proctoring.** The nature of online proctoring means that not all exam accommodations can be offered for online testing, such as a reader or sign language interpreter. Candidates can reach out to NCARB staff for more information about their specific accommodation.
- **Accommodations must be approved prior to scheduling an appointment.** If you would like to request an accommodation, you must receive approval *before* you schedule your appointment (whether online or in-person).



Your Guide To Online Proctoring and ARE 5.0

► Exam Delivery Moving to PSI in Summer 2021

NCARB will switch to a new test administration vendor, [PSI](#), in summer 2021. PSI offers both in-person and online proctored exam appointments. More information around the migration to PSI will be available early next year.



Key things to know:

- **NCARB will use PSI's third-party testing locations in addition to PSI's proprietary test centers.** This will significantly expand the number of physical test centers available to ARE candidates.
- **More information on how to look up your local PSI test center location will be provided in the spring 2021.**

ONLINE PROCTORING SETUP REQUIREMENTS

Before you schedule an online-proctored appointment, please take the time to make sure your computer and testing environment meet all the requirements established by both NCARB and Prometric. These requirements help ensure that all ARE divisions are administered under comparable conditions, and that the results represent a fair and accurate measurement.

You can find the full list of requirements in the *ARE 5.0 Guidelines*, as well as the highlights below:

► Systems Requirements

The ARE will require a combination of Prometric's systems requirements plus some additional requirements from NCARB designed to accommodate the ARE's graphic elements. These include:

- **Operating System:** Windows/MacOS
- **Web Browser:** [Latest Google Chrome](#)
- **Webcam Resolution:** A minimum of 640 X 480 pixels
- **Microphone:** Enabled at all times
- **Screen setup:** Laptop or desktop computer in a single monitor configuration; tablets or dual-monitor configurations are **NOT** acceptable. Laptops are required to be plugged directly into a power source and **UNATTACHED** from a docking station.
- **Screen Resolution:** A minimum of 1920 x 1080 pixels
- **Monitor Size:** 19-inch or larger monitor (using a smaller monitor will reduce image clarity, and may hinder your testing progress)

- **Webcam:** External webcam with the flexibility and cord length to provide a 360-degree view of your testing environment.
- **Internet Speed:** A minimum of 3 mbps of dedicated bandwidth
- **Internet Connection Type:** An ethernet cable connection is recommended, but if you use wi-fi, be sure you have a strong signal throughout your exam administration
- **Cables:** All cables connected to the computer and/or peripheral devices must be accessible and visible for full inspection prior to testing.

Tip: If you wish to use a single external monitor configuration with a laptop, connect a computer monitor cable directly from your external monitor to your laptop and close the laptop screen. You will not be able to use the laptop's integrated webcam or keyboard.



\$50 Rebate for First Online Proctored Appointment

To help offset the cost of meeting the system requirements for testing via online proctoring (such as the external webcam), NCARB will provide all candidates who schedule their first online appointment with a \$50 e-gift card. Every ARE candidate is eligible to receive one rebate. This gift card will be issued automatically after a candidate schedules their first online proctored appointment. Candidates who do not schedule an online proctored appointment will not be eligible.

The gift card will be delivered to the email address on file in your NCARB Record.

► Environmental Requirements

In addition to the technical requirements, your testing environment must meet the requirements within the [Prometric ProProctor User Guide](#). Please ensure the room you plan to test in meets all of the following conditions, and any others outlined by Prometric:

- **Indoors:** You must test indoors in a walled environment. Do not test in a room with see-through/glass walls.
- **Privacy:** You must have a private space, preferably with a single closing door. No people or animals can be present in the room while you test. If your testing room does not have a door, you can block the entrance with a bed sheet.
- **Lighting:** Your testing environment must be well-lit.
- **Quiet:** Your room must be free of background noise.
- **Workspace:** Your computer must be placed on a table or desk. You cannot test with your computer in your lap.
- **Free from distractions:** The room must be as uncluttered as possible. Your workspace and the surrounding area must be free of:
 - Cell phones or other electronic devices
 - Calculators
 - Paper or notepads
 - Books or study resources
 - Purses
 - Food or drinks
 - Tobacco or other smoking products



View the Prometric ProProctor User Guide online.

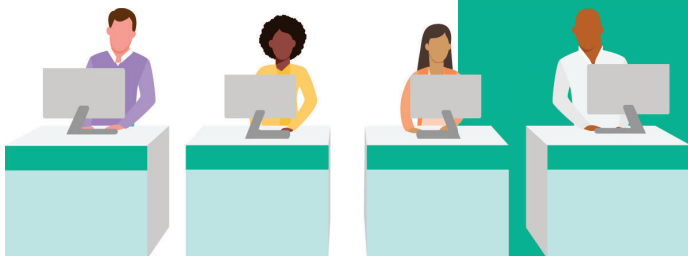
Prometric ProProctor User Guide

HOW NCARB DEVELOPS EXAM CHANGES

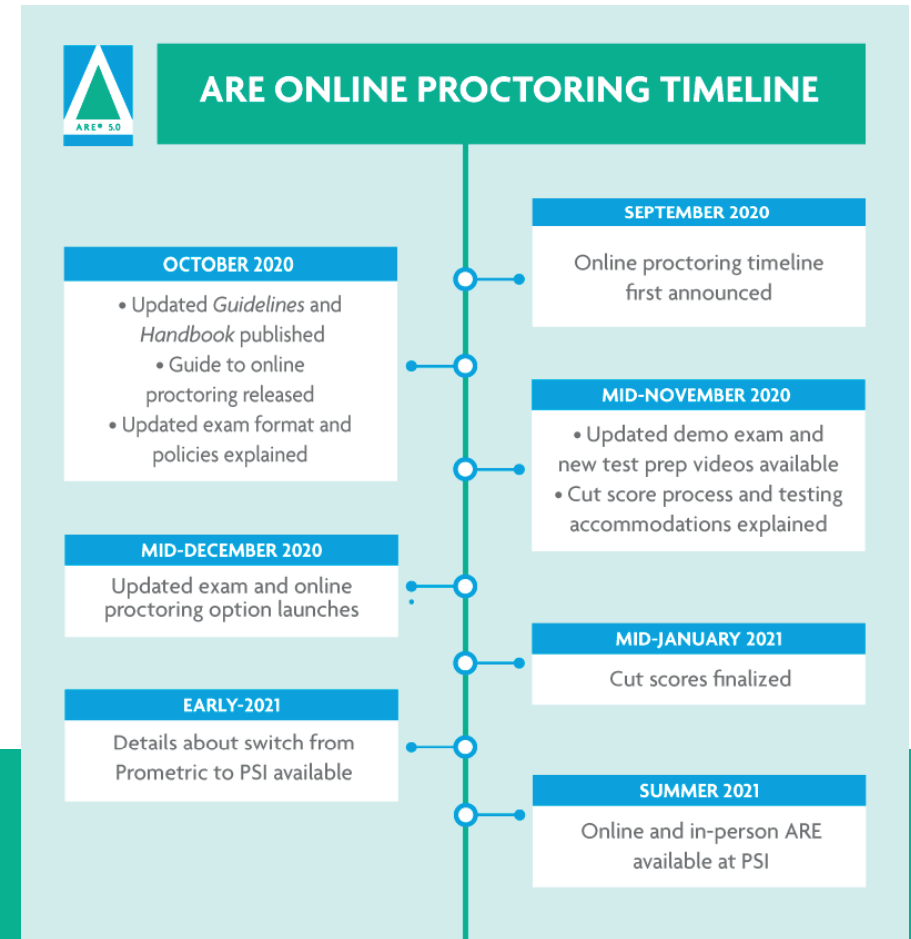
The ARE is an essential part of the licensure process, and enables licensing boards to carry out their work to protect the public by providing a reliable assessment of candidate competency. Because of this, NCARB takes the ARE very seriously, and no changes are made to the exam's navigation, content, or delivery without serious consideration.

The ARE is developed by hundreds of volunteer architects, who collaborate with NCARB's examination team (including staff architects) and psychometrician experts to ensure the ARE is reliable, rigorous, and fair. NCARB uses the psychometric services of Alpine Testing Solutions, who provide expertise regarding examination best practices. Any software needed for the exam delivery is developed in partnership with Zoomorphix Systems.

When NCARB makes changes to the exam, any updates are reviewed at the staff, psychometrician, volunteer, and Board of Director level before being announced to candidates. With the help of our psychometrician experts, NCARB monitors exam performance to ensure any changes aren't unfairly impacting candidates.



► ARE Timeline



FAQS

Why is NCARB launching online proctoring?

NCARB has been exploring the option to enable online proctoring for some time. The pandemic has highlighted the need for test delivery flexibility. With a possible spike in COVID-19 cases expected this fall and winter, candidates could experience more test center closures, further impacting their licensure progress. Because of this, NCARB is working to launch online proctoring in 2020 to provide access to the ARE for candidates who are not comfortable testing onsite or have underlying health conditions that limit their ability to test during the ongoing health crisis.

What do I do if there's a technical issue during my online-proctored exam?

If you need assistance at any time during your exam, you will be able to contact your online proctor through Prometric's secure testing browser. If you are disconnected from your exam during your appointment, you will be able to reboot your computer, run the system check, and re-launch your exam using the "Launch exam" button in Prometric's browser. You must go through the whole check-in process again; however, your exam will re-start from the point where it was disconnected.

Who does NCARB work with to determine exam changes?

NCARB partners with several groups of people to administer and update the ARE:

- Architect volunteers, who help develop items for the ARE
- Alpine Testing Services, who provide psychometricians (testing experts) to ensure NCARB meets industry best practices
- Jurisdictional licensing boards
- Zoomorphix Systems, who develop the software (such as the digital whiteboard) to deliver the ARE
- Prometric, who manages the test centers and provides proctoring services

When can I test the new exam navigation?

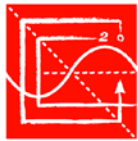
The updated demo exam will be available to candidates through My NCARB in mid-November.

Can I take the previous version of ARE 5.0?

No. Once the updates to the exam launch, all candidates will experience the updated version of the ARE.

Will the content/length of online-proctored exams be the same as the exams administered at the test center?

Yes, candidates testing online will experience the same exam as candidates testing in person, with the same number of items, same testing length, and same exam content and objectives.



January 26, 2021 Exam Administration – PE Exams

NCEES Exam Administration Services – Timeline of Key Activities

Please find below pertinent dates for the **January 26, 2021** Civil-only **regional** exam administration (<https://ncees.org/january-2021-pe-civil-exam-administration-updates/>). These dates will serve as a reminder of when tasks should be completed.

Due Date	Task
November 1	NCEES registration opens.
Ongoing – Approvals	Board staff will mark approvals in E3.
3:00 PM EST December 14	NCEES registration deadline – note the time!!
3:00 PM EST December 14	Deadline for examinees to submit ADA, Military, and Religious Accommodation requests to NCEES (refer to NCEES Web site for information). https://ncees.org/exams/special-accommodations/
3:00 PM EST December 14	Cancellation deadline for examinees. Additionally, this is the deadline for an examinee to change their exam discipline or module.
December 14-17	Reconciliation period for any remaining issues – Board will mark final approvals and notify those not approved that they will be cancelled.
3:00 PM EST December 17	All examinees must be either approved or cancelled in the system by this date. Registrations after this date must be granted by David Cox, CEO of NCEES, and only due to board error. PLEASE NOTE – ONLY 3 DAYS ARE ALLOWED TO FINALIZE APPROVAL OF EXAMINEES ONCE REGISTRATION CLOSES.
December 21	Order NCEES exams. No further registrations allowed.
2–3 weeks before exam	Exam authorizations available to candidates through their MyNCEES account (an email is sent as notification). If an examinee does not have access to their exam authorization, they should contact NCEES.
Tuesday, January 26, 2021	Exam administration.

If you have any questions regarding the above dates, please feel free to call me at 800-250-3196 ext. 5243 or email me: LSTRICKLAND@NCEES.ORG

Sincerely,

Lea Strickland

NCEES Exam Coordinator

MEMO**DATE:** October 21, 2020**TO:** Member Board Administrators and Testing Services**FROM:** Tim Miller, P.E., Chief Officer of Examinations**RE:** Notice of Special Pencil and Paper Administration for PE Civil

This is a notice regarding a special pencil and paper administration for the PE civil exam and provides Member Boards with important details, deadlines, and dates.

Winter 2021 NCEES Pencil-and-Paper Registration Deadlines

- **Winter 2021 Exam Date**—The special PE Civil pencil-and-paper exam will be administered on **January 26, 2021** regionally. Please refer to the COVID 19 page on the NCEES website for the current locations of the exam sites - <https://ncees.org/covid-19/>. Additional exam sites may be added. Examinees will be allowed to schedule their exam at any of these regional sites.
- **Winter 2021 Registration**—Registration for the Winter exam will open on **November 1, 2020** and will close for examinees at 3:00 p.m. eastern time on **December 14, 2020**. The deadline for boards/testing services to mark candidates approved is 3:00 p.m. eastern time on **December 17, 2020**. PLEASE NOTE – ONLY 3 DAYS ARE ALLOWED TO FINALIZE APPROVAL OF EXAMINEES ONCE REGISTRATION CLOSES. To meet the fulfillment and shipping requirements, we cannot add candidates after this time. Since NCEES is paying for the sites and proctors, NCEES will collect the administration fee from the examinees. If non-EAS boards wish to have their 3rd party testing service involved in the approval process, any associated fees should be handled separately. PLEASE BE AWARE THAT EXAMINEES MAY BE CONFUSED ABOUT YOUR APPROVAL REQUIREMENTS FOR THIS SPECIAL ADMINISTRATION.
- **Exam Accommodations**—All requests for testing accommodations must be submitted through the E3 system by the registration deadline of **December 14, 2020**. These include accommodations for ADA and religious reasons and for active military service. More information about accommodations is posted on the NCEES website. Member boards/testing services must provide all override information for approved ADA and religious accommodations to ensure that correct information is shown on a candidate's exam authorization. Any other requests for deviations from the schedule must be submitted to Bob Whorton, P.E., Manager of Compliance and Security, at bwhorton@ncees.org.
- **Exam Shipping**—Exam orders will be delivered to a site **January 15, 2021**. Inventory must be completed by **January 21, 2021**. A packing list will be included with each shipment, identifying the exam booklet serial numbers. Discrepancies between the packing list and the actual contents of the boxes should be reported to Bob Whorton at bwhorton@ncees.org as soon as they are found.

Spring 2021 NCEES Pencil-and-Paper Registration

Spring 2021 registration—Due to how the E3 system is structured, registration for the spring administration cannot open until after the special January administration has occurred. Typically, registration would open in December; however, for the April 2021 administration, registration will open **January 27, 2021** at 10:00 a.m. eastern time. Registration will close for examinees on **March 4, 2021** at 3:00 p.m. eastern time. More information will be sent to you after the fall 2020 exam administration.

If you have any questions about these changes or require additional information, please contact me at tmiller@ncees.org.

C: NCEES Board of Directors

David Cox, Chief Executive Officer
Davy McDowell, P.E., Chief Operating Officer
Steven Matthews, Chief Technology Officer
Bob Whorton, P.E., Manager of Compliance and Security
Ashley Cheney, Manager of Exam Publications
Sierra Burrell, Digital Communications Coordinator

2020 NCEES Annual Meeting

Action Items and Conference Reports



Vision

The vision of NCEES is to provide leadership in professional licensure of engineers and surveyors through excellence in uniform laws, licensing standards, and professional ethics in order to safeguard the health, safety, and welfare of the public and to shape the future of professional licensure.

Mission

The mission of NCEES is to advance licensure for engineers and surveyors in order to safeguard the health, safety, and welfare of the public.

This mission is supported through its member boards, board of directors, staff, board administrators, and volunteers by:

- Providing outstanding nationally normed examinations for engineers and surveyors
- Providing uniform model laws and model rules for adoption by the member boards
- Promoting professional ethics among all engineers and surveyors
- Coordinating with domestic and international organizations to advance licensure of all engineers and surveyors



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Introduction

One hundred years ago, the organization now known as NCEES held its first annual meeting in Chicago. Since then, its members have met in person each year at the annual business meeting to conduct Council business (with the exceptions of 1942 and 1945). While the structure and content of the meetings have varied over the last century, the focus has remained the same: to decide issues vital to engineering and surveying licensure in order to safeguard the health, safety, and welfare of the public.

This year, NCEES will still conduct essential Council business—but in a new format. Because of the global COVID-19 pandemic, the NCEES board of directors decided to hold an abbreviated annual meeting virtually on August 27 instead of the face-to-face meeting that had been scheduled for August 26–29 in Chicago.

Before the virtual annual meeting, member boards will vote by ballot in July on the following key Council business (elections and motions):

- Elections of the open positions for NCEES and zone officers
- Ratification of the proposed amendments to the *Zone Meeting and Continuity Guidelines*
- Approval of the 2019 annual meeting minutes
- Amendments to the *Bylaws*
- Approval of the application of the American Society of Plumbing Engineers to become a member of the NCEES Participating Organizations Liaison Council
- Approval of the 2020–21 NCEES operating and capital budgets

The results of these votes will be announced at the August 27 meeting. In addition, webinars were held before the August meeting to provide leadership reports, updates on finances, and a review of how the ballot process will be conducted and tabulated.

In the 2019–20 fiscal year, the following committees and task force spent many hours addressing their charges:

- | | |
|--|---|
| ▪ Advisory Committee on Council Activities | ▪ Finances |
| ▪ Awards | ▪ Law Enforcement |
| ▪ Education | ▪ Member Board Administrators |
| ▪ Examination Audit | ▪ Uniform Procedures and Legislative Guidelines |
| ▪ Examination Policy and Procedures | ▪ Special Committee on Bylaws |
| ▪ Examinations for Professional Engineers | ▪ Public Outreach Task Force |
| ▪ Examinations for Professional Surveyors | |

NCEES recognizes and thanks the committees for their dedicated work. All of their reports are included in this publication. A number of the committees developed motions that would have been presented to the Council in Chicago but now will not be voted on this year. Those draft motions are also included with the reports. To ensure that the work of these committees continues, the appropriate 2020–21 committee will be charged with reviewing the 2019–20 committee report and draft motions.

NCEES will continue to recognize the significant licensure milestones of the last century throughout 2020—the 100th anniversary of its founding and its 99th annual meeting—and throughout 2021, when NCEES will hold its 100th annual meeting in New Orleans.

2020 Annual Meeting Business Session Agenda

Dean Ringle, P.E., P.S., presiding

Thursday, August 27, 5:30 p.m. EDT

Call to order

Welcome

Introduction of NCEES board of directors

Quorum report

Officer reports

- President
 - President-elect
 - Actions taken by the board of directors
 - Motion to approve 2019 annual meeting minutes
- Treasurer
- Chief executive officer

Results from balloting process

- 2019 annual meeting minutes
- NCEES board of directors
 - President-elect
 - Treasurer
- Central Zone officers
 - Vice president
 - Assistant vice president
- Northeast Zone officer
 - Secretary-treasurer
- Southern Zone officer
 - Secretary-treasurer
- Western Zone officers
 - Vice president
 - Assistant vice president

- Special Committee on Bylaws
 - Motion 1
 - Motion 2
 - Motion 3
 - Motion 4
 - Motion 5

Board of directors

- Board of directors
 - Motion 1
 - Motion 2

Committee on Finances

- Committee on Finances
 - Motion 1
 - Motion 2

Board of directors

- Recognition of outgoing members
- Passing of the president's gavel
- Recognition of incoming members
- 2020–21 president's message

Board of Directors Positions on Motions Being Voted on by Ballot in July 2020

Member boards will vote on the following motions by ballot during July. Below is a summary of those motions and where they are located in this publication—as well as the board of directors position. All other motions included in committee reports are presented for information purposes only in order to document the work of those committees. Please see related information on page 1.

Motion	Topic	Board of directors position	Page numbers
Annual Meeting Minutes	Approval of 2019 annual meeting minutes	Endorses	10
Bylaws 1	Amend <i>Bylaws</i> 4.09	Endorses	27
Bylaws 2	Amend <i>Bylaws</i> 6.02	Endorses	28
Bylaws 3	Adopt <i>Bylaws</i> 10.0125	Endorses	28
Bylaws 4	Amend <i>Bylaws</i> 3.09	Endorses	29
Bylaws 5	Amend <i>Bylaws</i> 7.04	Endorses	29
Board of directors 1	Add American Society of Plumbing Engineers to POLC	Endorses	30
Board of directors 2	Ratify amendment to the <i>Zone Meeting and Continuity Guidelines</i>	Endorses	30
Finance 1	Adopt 2020–21 operating budget	Endorses	34
Finance 2	Adopt 2020–21 capital budget	Endorses	34

Acronyms and Abbreviations

AAEES	American Academy of Environmental Engineering and Scientists
ABET	Accreditation Board for Engineering and Technology, Inc.
ACCA	Advisory Committee on Council Activities
ACEC	American Council of Engineering Companies
ADA	Americans with Disabilities Act
AEI	Architectural Engineering Institute of ASCE
AIA	American Institute of Architects
AIChE	American Institute of Chemical Engineers
AIME	American Institute of Mining, Metallurgical, and Petroleum Engineers
ANS	American Nuclear Society
ANSAC/ABET	Applied and Natural Science Accreditation Commission of ABET
AP	NCEES Administrative Policy
APEC	Asia-Pacific Economic Cooperation
APEGA	Association of Professional Engineers and Geoscientists of Alberta
APEGBC	Association of Professional Engineers and Geoscientists of British Columbia
APEGM	Association of Professional Engineers and Geoscientists of Manitoba
ARPL	Alliance for Responsible Professional Licensing
ASABE	American Society of Agricultural and Biological Engineers
ASCE	American Society of Civil Engineers
ASEE	American Society for Engineering Education
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
ASPE	American Society of Plumbing Engineers
ASME	American Society of Mechanical Engineers
ASPRS	American Society for Photogrammetry and Remote Sensing
AUC	American University in Cairo
AUS	American University of Sharjah
CBT	Computer-Based Testing
CEAB	Canadian Engineering Accreditation Board
CESB	Council of Engineering and Scientific Specialty Boards
CIDQ	Council for Interior Design Qualification
CIE	Chinese Institute of Engineers (Taiwan)
CLARB	Council of Landscape Architectural Registration Boards
CLEAR	Council on Licensure, Enforcement, and Regulation
CLSA	California Land Surveyors Association
CPC	Continuing Professional Competency
CSBSR	Colonial States Boards of Surveyor Registration
DiscoverE	Formerly the National Engineers Week Foundation
E.I.	Engineer Intern
E.I.T.	Engineer-in-Training
EAC/ABET	Engineering Accreditation Commission of ABET
EAP	NCEES Examination Administration Policy
EDP	NCEES Examination Development Policy
EPE	Committee on Examinations for Professional Engineers
EPP	Committee on Examination Policy and Procedures
EPS	Committee on Examinations for Professional Surveyors
ETAC/ABET	Engineering Technology Accreditation Commission of ABET
EWB–USA	Engineers Without Borders USA
EWeek	DiscoverE Engineers Week
FE exam	Fundamentals of Engineering Examination
FP	NCEES Financial Policy
FS exam	Fundamentals of Surveying Examination
ICOR	Interprofessional Council on Registration
IEA	International Engineering Alliance
IEEE-USA	Institute of Electrical and Electronics Engineers-USA
IISE	Institute of Industrial and Systems Engineers
IPEA	International Professional Engineers Agreement
ISA	International Society of Automation

ITU	Istanbul Technical University
JPEC	Japan PE/FE Examiners Council
KPEA	Korean Professional Engineers Association
L.S.	Land Surveyor
L.S.I.	Land Surveyor Intern
L.S.I.T.	Land-Surveyor-in-Training
MBA	Member Board Administrator
MLE	Model Law Engineer
MLS	Model Law Surveyor
MLSE	Model Law Structural Engineer
MSPS	Michigan Society of Professional Surveyors
NAE	National Academy of Engineering
NAFE	National Academy of Forensic Engineers
NCARB	National Council of Architectural Registration Boards
NCEES	National Council of Examiners for Engineering and Surveying
NCSEA	National Council of Structural Engineers Associations
NICET	National Institute for Certification in Engineering Technologies
NIEE	National Institute for Engineering Ethics
NSAE	National Society of Architectural Engineers
NSBE	National Society of Black Engineers
NSPE	National Society of Professional Engineers
NSPS	National Society of Professional Surveyors
PAKS	Professional Activities and Knowledge Study
P.E.	Professional Engineer
PE exam	Principles and Practice of Engineering Examination
P.L.S.	Professional Land Surveyor
POLC	Participating Organizations Liaison Council
PP	NCEES Professional Policy
PS	NCEES Position Statement
P.S.	Professional Surveyor
PS exam	Principles and Practice of Surveying Examination
SaGES	Surveying and Geomatics Educators Society
SAME	Society of American Military Engineers
SCE	Saudi Council of Engineers
S.E.	Structural Engineer
SEI	Structural Engineering Institute of ASCE
SFPE	Society of Fire Protection Engineers
SHPE	Society of Hispanic Professional Engineers
S.I.	Surveyor Intern
S.I.T.	Surveyor-in-Training
SME	Society for Mining, Metallurgy, and Exploration
SNAME	Society of Naval Architects and Marine Engineers
SPE	Society of Petroleum Engineers
SWE	Society of Women Engineers
TAMUQ	Texas A&M University at Qatar
TMS	The Minerals, Metals, and Materials Society
UESI	Utility Engineering and Surveying Institute of ASCE
UPLG	Committee on Uniform Procedures and Legislative Guidelines

2019–20 NCEES Leadership

BOARD OF DIRECTORS/OFFICERS

President

Dean Ringle, P.E., P.S.
Ohio

President-elect

Christopher Knotts, P.E.
Louisiana

Past president

James Purcell, P.E.
New Jersey

Treasurer

Timothy Rickborn, P.E.
South Carolina

Central Zone vice president

Marlon Vogt, P.E.
Iowa

Northeast Zone vice president

Christopher Duhamel, P.E., P.L.S.
Rhode Island

Southern Zone vice president

Timothy Lingerfelt, P.L.S.
Tennessee

Western Zone vice president

Brian Robertson, P.E.
Colorado

Secretary/chief executive officer

David Cox
South Carolina

ZONE ASSISTANT VICE PRESIDENTS

Central Zone

Abiodun (Abe) Adewale, P.E.
Missouri

Northeast Zone

Ronald Willey, Ph.D., P.E.
Massachusetts

Southern Zone

Andrew Zoutewelle, P.L.S.
North Carolina

Western Zone

Scott Bishop, P.S.
Utah

ZONE SECRETARY-TREASURER

Central Zone

Dennis Martenson, P.E.
Minnesota

Northeast Zone

Joseph Flynn, L.S.
Vermont

Southern Zone

Ivan Hoffman, P.S.
Arkansas

Western Zone

Richard (Ric) Moore, P.L.S.
California



President's Report

Dean Ringle, P.E., P.S.

As I write this article, we are still in the midst of a worldwide pandemic. Who would have guessed that a year ago? Much has happened since our August 2019 annual meeting, and a lot of it has been good. The first half of our year was fairly normal. The NCEES board of directors met throughout the fall, winter, and early spring, making plans and looking to the future. Most of our committees were able to meet before the travel restrictions kicked into play, discussing the charges before them and preparing their reports. All facets of our exam process—creation, evaluation, and testing—stayed on track. So, from NCEES staff and the board of directors to the exam committees, committee chairs, and everyone involved in the examination process, I give a big thank you for your quality work and commitment.

In the midst of our progress, our world changed with the spread of the COVID-19 pandemic. The true meaning of safeguarding the health, safety, and welfare of the public became a worldwide concern and infiltrated every aspect of our lives. However, the characteristics that make up our engineering and surveying professions and that are woven into our innermost being—the curiosity, the investigative nature, the problem-solving thought process, the desire to make something better—all of these came together to battle this new nemesis. As one example, engineers at a research institute teamed with other scientists to create a method for cleaning and sterilizing throwaway masks, allowing them to be safely reused. Looking for ways to modify or reinvent uses for existing technology, engineers have helped world societies in their battle against the pandemic.

As we have all experienced, disruptions have become a common occurrence. NCEES canceled all exam development and evaluation meetings during the second half of our annual cycle. This is the year the word “flexibility” became a must-have trait and the term “virtual meetings” became the norm.

The pandemic made the year 2020 a year of firsts for NCEES.

- Our first all-zone meeting, to be held in Houston, Texas, was canceled (this was also the first time that all zone interim meetings were canceled in a single year).
- Testing sites for both computer-based and pencil-and-paper exams were closed, and our complete April 2020 exam cycle was canceled. A backup plan to expand the October pencil-and-paper exam administration is in the works.
- Our August annual meeting has been revised. Instead of holding an in-person meeting in Chicago (the site of our first annual meeting 100 years ago), NCEES will now hold a much smaller and first-ever virtual annual meeting.
- During this meeting, the president will pass the gavel to the 2020–21 president-elect virtually.

The move to the new headquarters in Greenville, South Carolina, was a long process, with the remodeling mostly complete before the pandemic affected material delivery too much. And then, of course, the move-in hit when the stay-at-home/work-at-home orders were in place. Nonetheless, NCEES has made the full transition of its headquarters from Clemson to Greenville and continues to prepare for the next challenge. I am thankful to the NCEES staff, led by Chief Executive Officer David Cox, for their quality work. They are a hardworking team focused on the NCEES vision and mission and on assisting all of our member boards. I am also thankful for the quality engineering and surveying members of our NCEES member boards and all the volunteers who serve.

All in all, I am very thankful to have been able to serve you as our president this year. I look forward to assisting incoming President Christopher Knotts, P.E., and the other members of the NCEES board of directors as they continue to lead us into our next 100 years.

I look forward to seeing you in person at future events as we are able to move away from this year's seismic blip in our world's history and continue to advance our professions for the public good.



President-Elect's Report

Christopher Knotts, P.E.

I hope this message finds everyone safe and healthy. Obviously, the COVID-19 pandemic has forced us all to make many changes in our lives, and NCEES was not insulated from the virus's effects. The board of directors met several times via Zoom to discuss the options. It ultimately opted to cancel the administration of exams and the combined zone interim meeting planned for April in Houston. It also decided to change the NCEES annual meeting planned for August in Chicago to a virtual meeting on August 27 and to convert all NCEES committee meetings to virtual meetings for the remainder of 2020.

These were not easy decisions and were made after much deliberation, but I believe they are the correct decisions, given the circumstances. While we are living in very unusual times, NCEES will endure because its members and staff are committed to the Council's mission statement, which is to “advance licensure for engineers and surveyors in order to safeguard the health, safety, and welfare of the public.” I applaud all NCEES executive leadership for their response to the virus situation.

While COVID-19 has impacted all activities, actions that adversely affect professional licensure continue to occur. NCEES has therefore increased the number of resources it provides for member boards to use when advocating for the health, safety, and welfare of the public through licensure. This past year, NCEES became a charter member of the Alliance for Responsible Professional Licensing (ARPL), whose mission is to provide education on the value of professional licensure. ARPL is currently comprised of nine organizations representing the professions of architecture, accounting, engineering, land surveying, and landscape architecture. The value of ARPL was immediate and represents a quantum leap for the participating organizations to defend against threats to public protection.

The Public Outreach Task Force has served a very valuable mission during the past two years, and I intend to continue that effort in 2020–21. As professional engineers and professional surveyors, we must all do a better job of educating the general public, elected officials, and students about the importance of our professions and professional licensure. Outreach efforts help us protect the public, maintain the status of the engineering and surveying professions in the public, and recruit the next generation of professionals.

While we do not know when things will return to normal, we do know our upcoming events and meetings will be different for the foreseeable future. I look forward to the upcoming year and working with all of you. I am certain we will adapt and that NCEES will continue to be a great organization because of you.

Board of Directors Action Items

Action items from the fifth meeting of the 2018–19 board of directors August 13, 2019, Washington, D.C.

- Approved minutes of the fourth meeting of the 2018–19 board of directors
- Approved nominations from member boards for emeritus and associate member status
- Ratified resolutions regarding a potential sales agreement with the Clemson University Land Stewardship Foundation; granting of a recreational trail easement to the county of Greenville South Carolina; and making certain upfits and improvements to 200 Verdae Blvd. in Greenville, South Carolina
- Denied a request from ASEE to build a platform to capture data related to engineering education that would allow for data mining for benchmarking or examining trends in data for engineering institutions
- Approved an additional \$250,000 to the 2019–20 budget to develop a marketing program to increase the number of licensed professionals in the geomatics field and for NCEES staff to work in conjunction with the National Society of Professional Surveyors and the coalition of state surveying societies (Maryland Society of Surveyors, North Carolina Society of Surveyors, Surveying and Mapping Society of Georgia, Tennessee Association of Professional Surveyors, and Virginia Association of Surveyors)
- Approved the recommendations of a special Exam Breach Discussion Group not to breach the PE examinations from the April 2019 exam administration
- Approved an additional 4 percent contribution to the 401(k) retirement plan for all eligible NCEES staff participants
- Authorized NCEES staff to move forward with investigating potential venues in Kansas City, Missouri, to conduct the 2024 NCEES annual meeting
- Voted to not endorse two Alabama board motions concerning a reduction in examination fees and capping reserve funds of the Council, respectively

Action items from the first meeting of the 2019–20 board of directors August 17, 2019, Washington, D.C.

- Approved the proposed resolution authorizing the CEO to execute contracts and other documents on behalf of the board and to select banks or other thrift institutions for the deposit of Council funds

Action items from the second meeting of the 2019–20 board of directors November 1–2, 2019, Tucson, Arizona

- Approved minutes of the fifth meeting of the 2018–19 board of directors
- Approved minutes of the first meeting of the 2019–20 board of directors
- Ratified the NCEES president's nominations for ABET Commission representatives
- Approved nominations from member boards for emeritus member status
- Approved the Participating Organizations Liaison Council (POLC) annual dues of \$300
- Approved charging no dues for International Affiliate Organizations
- Approved continuation of a board orientation annually and for staff to modify the budget appropriately
- Approved an increase in the round-trip mileage for a travel exception to 1,000 miles to go into effect immediately
- Approved exam item replacement costs for 2020 with \$1,897 for each pencil-and-paper multiple-choice item, \$2,123 for each computer-based testing multiple-choice item, and \$17,448 for each constructed response item
- Approved \$3.4 million in designated assets as replacement costs in the event of a total examination breach
- Approved a contribution of \$25,000 to the University of Guam Endowment Foundation to purchase laboratory equipment and fund associated expenses

Action items from the third meeting of the 2019–20 board of directors February 28–29, 2020, Coronado, California

- Approved minutes of the second meeting of the 2019–20 board of directors
- Approved nominations from member boards for emeritus and associate member status
- Ratified the action taken by the NCEES board of directors to approve the audit report of the 2018–19 NCEES financial records

- Approved the 2019–20 financial auditors
- Ratified the International Facility Management Association (IFMA) as a member society of ABET
- Ratified the Engineering Technology Accreditation Commission (ETAC)/ABET commission representative
- Ratified the date change for the 2021 Southern Zone interim meeting
- Approved the Committee on Examination Policy and Procedures recommendations related to examination with volumes below policy-dictated levels
- Ratified the expenditure of approximating \$25,000 for joint lobbying efforts with the National Council of Architectural Registration Boards (NCARB) in the state of Arizona
- Approved that NCEES can engage in lobbying efforts when necessary and appropriate to protect the public as allowed by the NCEES vision and mission statements and that NCEES abide by all Internal Revenue Service (IRS) requirements related to lobbying
- Approved the outlined process for handling lobbying requests
- Directed CEO Cox to cause the 501(h) election to be filed on Form 5768 with the IRS
- Approved a revision to the NCEES *Zone Meeting and Continuity Guidelines* to state that nominations may be made only by a member board and for the revised guidelines to be ratified at the next zone meeting

Action items from the fourth meeting of the 2019–20 board of directors June 12, 2020 (virtual meeting)

- Approved minutes of the third meeting of the 2019–20 board of directors
- Approved nominations from member boards for emeritus and associate member status
- Approved the investment guidelines as recommended by the Investment Advisory Group
- Ratified the date change for the 2021 Southern Zone interim meeting
- Ratified the decision to cancel the April 2020 pencil-and-paper exam administration
- Ratified the decision to cancel the 2020 zone interim meeting
- Ratified the approval of a \$4 million transfer from reserves to the NCEES operating account when the operating funds go below \$3 million
- Approved a virtual format for the annual meeting, including a process for member boards to vote on elections and essential motions by ballot, with a due date of July 31, 2020, and for results to be announced at a virtual business session on August 27, 2020
- Approved for NCEES staff to move forward with conducting the 2024 NCEES annual meeting in Chicago, Illinois, on August 20–24, 2024
- Authorized NCEES staff to move forward with conducting an all-zone meeting in 2023 in Houston, Texas, with the date to be determined
- Endorsed the American Society of Plumbing Engineers for membership in POLC and for a motion to be placed on the ballot for the 2020 annual meeting
- Authorized a contribution of \$100,000 to Engineering Change Lab USA
- Approved the draft 2020–21 operating and capital budgets as proposed by the Committee on Finances
- Endorsed all motions as presented by the Committee on Bylaws
- Approved the NCEES Committee on Awards recommendations for the NCEES Distinguished Service Award, Meritorious Service Award, and Distinguished Examination Service Awards
- Endorsed a motion to modify the *Zone Meeting and Continuity Guidelines*
- Approved the 2020–21 committee/task force/officer reports for publication in the annual meeting *Action Items and Conference Reports*

Motion to Approve the 2019 Annual Meeting Minutes

Move that the Council approve the minutes of the 2019 annual meeting.

Note: This motion was placed on the ballot that was sent to NCEES member boards to vote on in July 2020.



Treasurer's Report
Timothy Rickborn, P.E.

As my third and final year as your treasurer closes, I would like to say that I have truly enjoyed serving as NCEES treasurer and as a member of the board of directors. This experience has allowed me to expand my horizons and gain a broader understanding of the different, but oftentimes similar, challenges that our member boards face.

During this past year, I have served on the Financial Audit Committee and as the board of directors liaison to the Committee on Finances, the Committee on Uniform Procedures and Legislative Guidelines, and the Investment Advisory Group. I can assure you that much attention is devoted to the Council's finances and the budget development process by the NCEES staff, the many volunteers on the Committee on Finances, and the board of directors. It has been a pleasure to work with all of these dedicated, hardworking individuals during the past three years. My thanks go out to everyone.

Each year, NCEES retains an independent firm to perform an audit of the financial statements and records for NCEES. The audit process typically begins with interim work in June and is completed in October. For fiscal year 2018–19, the auditor's report provided a clean opinion of the Council's finances and identified no adjustments, misstatements, or material weaknesses with the Council's record-keeping processes. The report concluded that the Council's financial statements were fairly presented in accordance with generally accepted accounting principles.

Fiscal year 2019–20 started very much like that of previous years. Revenues and expenses were fairly consistent with minor variations from the budget that have occurred in past years.

In March 2020, the COVID-19 pandemic turned the world upside down as spread of the virus advanced rapidly. The global outbreak resulted in widespread disruptions and changes in what we have long considered "normal" in our personal and business lives. While some of the short-term effects on business are currently being recognized, it will likely take time to understand the long-term ramifications across many industries, including engineering and surveying.

NCEES was not immune to the disruptions caused by the pandemic. Some of the disruptions faced included the following: cancellation of the combined zone interim meeting in Houston; cancellation of both computer-based testing (CBT) and pencil-and-paper testing; cancellation of exam development meetings; and conversion of our annual meeting from an in-person meeting in Chicago to a virtual meeting format. NCEES staff has done an excellent job responding to these disruptions and making necessary adjustments.

The financial report for the first eight months of this fiscal year's reporting cycle through May 31, 2020, indicates significant effects to the income and expense sides of our budget. NCEES has completed two-thirds of this fiscal year with a gain from operations of \$193,887 as compared to a budgeted gain of \$2.9 million producing a negative budget variance of \$2.7 million. Revenues from operations through the end of the reporting period were \$8.2 million unfavorable to the budget approved at last year's annual meeting.

The cancellation of the April administration of pencil-and-paper exams affected approximately 16,000 examinees and accounted for \$4 million of the negative variance in exam revenue. Refund of the administration fees to exam candidates accounted for \$1.4 million. We are optimistic that exam demand for the October 2020 administration will be higher due to the unplanned cancellation of the April administration. Staff has developed plans for administering these exams over two days (October 22 and 23). As all examination sites must operate in compliance with jurisdictional capacity and social distancing requirements, there will likely be a reduction to the

number of examinees that can be accommodated at some of the exam sites. Therefore, it is possible that the overall volume for the October 2020 administration may not approach that of the typical April and October volumes added together.

The closure of Pearson VUE testing centers from mid-March through the end of April negatively impacted CBT revenue by approximately \$2.77 million. Rescheduling fees for examinees affected by the closure of testing centers were waived. Although Pearson VUE testing centers began to reopen in early May, CBT revenue will continue to be affected due to varying jurisdictional restrictions and reduction in capacity at all test centers to comply with social distancing requirements. Decreases in both pencil-and-paper and CBT exam volumes also negatively impacted demand for study materials by \$321,000.

On a positive note, expenses were \$5.5 million less than budget for the first eight months of this fiscal year. CBT exam seat fees were \$2.1 million less than budgeted due to the cancellation of CBT exams in March and April. Zone meeting expenses for the period were \$398,000 less than budgeted due to the cancellation of the combine zone interim meeting. Cancellation of in-person meetings resulted in a positive variance of \$684,000. Additional favorable budget variances on the expense side will continue to be realized for this fiscal year due to cancellation of in-person meetings through August, cancellation of the onsite annual meeting, and cancellation of some promotion and outreach activities such as other conference sponsorships and the NCEES Engineering Education and Surveying Education awards.

During my time as treasurer, I have often reminded our membership that although NCEES is a nonprofit corporation, it is vital that NCEES remain financially strong like other business entities in order to sustain itself, grow, and fulfill its mission. Financial policies maintained by the Council have recognized the importance of having adequate reserve funds. These reserves can be categorized as annual operating reserves, exam breach reserves, and reserves available for mission. During my time as treasurer, NCEES was able to use a portion of our reserves to purchase a new headquarters building in Greenville, South Carolina, with no need for any financing. This is truly a credit to the financial vision established over the years. More importantly, the Council's reserves have permitted us to weather the uncertainty associated with the COVID-19 crisis and the substantial loss of income resulting from the cancellation of testing during March and April. Thus far, we have had to transfer \$2 million from reserves to offset the loss of revenue.

The board of directors and NCEES Investment Advisory Group have continued to monitor current financial trends and to consider appropriate adjustments to our investments. The Council's investment advisory firm, JOYN Advisors, has provided NCEES with sound guidance regarding our investments to ensure positive returns and to realize cost savings on management fees. Members of the Investment Advisory Group have taken part in both face-to-face meetings and conference calls with JOYN representatives several times throughout the year. In early March, the Investment Advisory Group met with JOYN to review the investment portfolio's performance, current asset allocation, and some suggested minor changes to the asset allocation. The continued use of a conservative investment strategy should serve to maintain our reserves at adequate levels with modest growth. The recommended changes to the asset allocation were approved by the NCEES board of directors in June.

The reported value of our investment portfolio is subject to the value determined on the date that the financial year ends. The actual value, of course, fluctuates with market changes on a day-to-day basis. As of May 31, 2020, the Council's investments were performing at -2.76 percent for the year. At this same time last year, our investments were performing at -3.27 percent. At the end of the 2018–19 fiscal year, our investment portfolio reflected a gain of \$802,163. Information about the value of NCEES investments can be found on page 41 of the NCEES 2019 annual report, which is available in a PDF format at neces.org/annualreport.

Each year at the annual meeting, the Council votes to approve a budget for the upcoming year. Development of the following year's budget actually begins shortly after each annual meeting and undergoes many revisions as it makes its way through the process. The budget is reviewed by the Finance Committee and the board of directors prior to its presentation at the annual meeting. The process of creating and tracking the budget is constant. Our financial staff, led by Chief Financial Officer Betsy Pearson, has done an excellent job of responding to the financial turmoil created by COVID-19.

While our revenue has been severely impacted this year, our expenses have decreased and our investment portfolio has continued to perform satisfactorily in the recently turbulent market. Despite the ongoing

pandemic, the financial health of NCEES remains strong. The ability to have this strength will continue to be the key to lasting success for this organization to carry out its vision and mission.

Once again, I sincerely appreciate the opportunity you have given me to serve as your treasurer. I look forward to continuing my service to the Council in the future. Thank you.



Central Zone Vice President's Report

Marlon Vogt, P.E.

I was excited to serve as the Central Zone vice president because during my term NCEES was facing the selection of a new CEO and a new headquarters. Thankfully, both were very smooth transitions. But nothing prepared me, or any of us, for March 2020.

Shortly after returning home from the February NCEES board of directors meeting, I attended my final Iowa board meeting on March 12. That afternoon, while on my drive to visit the Nebraska engineering board, we held an NCEES board of directors conference call that resulted in canceling both the Houston zone interim meeting and the April pencil-and-paper exams. I was pleased to visit the Nebraska board on Friday and then returned home. At the time of this writing, I am starting week nine of working from home. Our world has changed.

The Central Zone met at the annual meeting in Washington, D.C., held August 14–17, 2019. All Central Zone boards were represented, and we welcomed 14 first-time attendees from our zone. The zone approved both the 2019 zone interim meeting minutes and the revised *Zone Meeting and Continuity Guidelines*. The zone had helpful, rigorous discussions about several Council motions. The other topic of much discussion was the variability among the zone boards related to the licensing of engineering technology degrees and how we all could start to better align our state rules and laws regarding these degrees.

The Central Zone was originally scheduled to hold its second meeting at the combined zone interim meeting in Houston, Texas, in April 2020. However, this meeting was canceled because of the COVID-19 pandemic. Consequently, a vote by ballot will be held in July to select the new Central Zone vice president and assistant vice president. Michael Drewyor, P.E., P.S. (MI) is the nominee for the 2020–22 Central Zone vice president; currently, there is no nominee for assistant vice president. The ballot will also include a place to vote for the new NCEES president-elect and NCEES treasurer. The election results will be announced during a virtual NCEES business meeting on August 27.

My thanks and appreciation go to the 2019–20 zone officers: Assistant Vice President Abiodun (Abe) Adewale, P.E. (MO) and Secretary-Treasurer Dennis Martenson, P.E. (MN). We had monthly conference calls to stay connected and coordinated. I appreciate that zone leadership was a team effort.

The Awards Committee identified two very deserving Central Zone Distinguished Service Award winners this year: Dennis Martenson and Steven Bishop, S.E. (IL-SE). They will be recognized at the next Central Zone meeting. I thank the Awards Committee members and all the volunteers who served on the zone standing committees this year.

My highlight of this second year of service has been the opportunity to visit all of the Central Zone boards. Most visits have been live and in person, but the pandemic will likely force the final three visits to be by video conference. I have appreciated seeing both the commonalities and the differences among the zone boards. I have enjoyed the hospitality, great discussions about common issues, and friendships that always result from time together. I am encouraged by the boards' focus on improving licensure mobility and their responses to the growing challenges to protecting the public through professional licensing. My admiration for the professionalism, hard work, and dedication of the zone member board administrators, staff, and members has only grown as a result of our meetings. My thanks to the NCEES board of directors for helping make these visits a reality.

Finally, I want to share my gratitude and appreciation for the outstanding NCEES staff and their invaluable service to the organization and the member boards. They have stepped up to meet the incredible challenges of the pandemic without missing a beat. I also thank the Central Zone for the humbling privilege of serving you in this role. I will gratefully look at this time as a career and lifetime highlight.



Northeast Zone Vice President's Report

Christopher Duhamel, P.E., P.L.S.

My first year as the Northeast Zone vice president has been a rewarding experience. I have been able to see firsthand how the NCEES chief executive officer and staff have been able to react and overcome extraordinary circumstances to serve our member boards and our professional community. Decisions to limit travel and conduct virtual meetings have been implemented to ensure safety for all those concerned.

It was unfortunate that the Northeast Zone was unable to meet in Houston, Texas. The benefits of getting together to share food, drink, and laughs will have to wait until it is safe to travel. I can share that I have had two new grandsons in this shutdown, George and Conner. Life is good, despite the lockdown.

The zone Nominating Committee—comprised of Thomas Orisich, P.L.S. (MD-LS), Mandy Holway, P.E. (ME-PE), Leslie Gates, P.E. (WV-PE), and Samuel Wilson, P.E. (DC)—met online to consider nominations for the Northeast Zone Distinguished Service Award. Two awards were submitted by Ronald Willey, Ph.D., P.E. (MA), who recommended Carmine Balascio, Ph.D., P.E. (DE-PE) and Paul Tyrell, P.E., P.L.S. (MA). Both nominations were gratefully accepted and approved by the committee. It is an honor to present Carmine and Paul with the 2020 Northeast Zone Distinguished Service Award. We will present the awards in person at the next face-to-face zone meeting.

I thank Joseph Flynn, L.S. (VT-LS) for his service as Northeast Zone secretary-treasurer. Joe is a hard worker behind the scenes and a strong advocate for the survey profession and our NCEES organization. I also thank Northeast Zone Assistant Vice President Willey for his service this past year. I look forward to working with Ron this coming year.

The draft Northeast Zone minutes from the August 2019 annual meeting are posted online at MyNCEES/Board Resources/Zones; the zone will vote to approve these minutes at its next zone meeting.

The Northeast Zone was originally scheduled to meet as part of the combined zone interim meeting in Houston in late April 2020. However, this meeting was canceled because of the coronavirus pandemic. Therefore, a vote by ballot will be held in July to select the new Northeast Zone secretary-treasurer; the ballot will also include a place to vote for the new NCEES president-elect and NCEES treasurer. The election results will be announced during a virtual NCEES business meeting on August 27.

The Northeast Zone is planning the 2021 interim meeting for next April in Newport, Rhode Island. It is a beautiful city on the harbor that I hope you will be able to enjoy. I look forward to seeing you then.



Southern Zone Vice President's Report

Timothy Lingerfelt, P.L.S.

My first year as the Southern Zone vice president has been more unique and challenging than I could have ever anticipated.

I am honored to serve the Southern Zone and its member boards as their representative on the NCEES board of directors. The individuals involved in the Southern Zone truly make my job easier, as they are always willing to help while maintaining the utmost professionalism. I had the privilege to serve as board liaison to the Committee on Examinations for Professional Surveyors. As a surveyor, this was very gratifying to be a part of.

The NCEES board of directors began the year with business as usual, continuing the renovation of the new headquarters and planning for the future. Unforeseen, COVID-19 appeared and disrupted all matters. The board of directors and our CEO have been making unprecedented decisions, including canceling the zone interim meeting and the annual face-to-face meeting (which is being replaced with a virtual meeting on August 27)—quite a start for our CEO in his second year and for the new members of our board of directors.

In my first year on the board of directors, I have had the opportunity to work with the 2019–20 Southern Zone leadership: Assistant Vice President Andrew Zoutewelle, P.L.S. (NC) and Secretary-Treasurer Ivan Hoffman Jr., P.S. (AR). Each has provided valuable service to our zone and to me. This is greatly appreciated, and I am honored to serve with them.

The Southern Zone met this year in conjunction with the annual meeting in Washington, D.C., on August 14–17, 2019. The draft Southern Zone annual minutes are posted online at ncees.org/resources (see Board Resources/Zones); the zone will vote to approve these minutes at its next zone meeting.

The Southern Zone was originally scheduled to meet as part of the combined zone interim meeting in Houston, Texas, in late April 2020. However, this meeting was canceled because of the coronavirus pandemic. Therefore, a vote by ballot will be held in July to select the new Southern Zone secretary-treasurer; the ballot will also include a place to vote for the new NCEES president-elect and NCEES treasurer. The election results will be announced during a virtual NCEES business meeting on August 27.

In terms of planning for upcoming zone meetings, North Carolina will host the Southern Zone interim meeting in 2021, and Oklahoma is scheduled to host a joint meeting with the Central Zone in 2022. The NCEES board of directors will be recommending that a combined zone interim meeting be held in Houston in 2023.

The 2020 Awards Committee did not receive any nominations for zone service awards this year. I encourage all Southern Zone members to find worthy candidates and nominate them for 2021. Nominations are due in January each year.

The following are the 2020–21 Southern Zone committee appointments:

Awards Committee

- Chair—Bobbie Shields, P.E. (NC)
- Nathan Johnson, P.E., P.L.S. (AL)
- Glen Smith, P.E., P.L.S. (OK)

Leadership Committee

- Chair—Andrew Zoutewelle, P.L.S. (NC)
- Zana Raybon (FL-PE MBA)
- Lamberto (Bobby) Balli, P.E. (TX)
- Henry Dingle Jr., P.L.S. (SC)

Nominating Committee

- Chair—Dennis Truax, Ph.D., P.E. (MS)
- Jeffrey Pike, P.E. (LA)
- Richard Bursi, P.E. (TN-PE)
- Kevin Fleming, P.E. (FL-PE)

Site-Selection Committee

- Chair—Doyle Allen, L.S. (VA)
- Steven Hyde, P.S., P.S.M. (FL-PS)
- Antonio Medina-Delgado, P.E. (PR MBA)
- David Beasley, Ph.D., P.E. (AR)

As I close out my first year as the Southern Zone vice president, I thank the Southern Zone members for allowing me to serve each of you. Service to the zone, my profession, and NCEES is very rewarding and helps guide my path in life.



Western Zone Vice President's Report

Brian Robertson, P.E.

I write this report while under a statewide stay-at-home order as part of Colorado's COVID-19 response efforts. The recent overuse of the word "unprecedented" has been, in a word, unprecedented. However, it is the most accurate adjective in many ways, and it applies to many issues facing NCEES and our zone.

The Western Zone met only once this year, in conjunction with the NCEES annual meeting in Washington, D.C., on August 14–17, 2019. Due to COVID-19, the board of directors canceled the combined zone interim meeting in Houston in April (which, in itself, was unprecedented by having all four zone interim meetings co-located and concurrent) and the face-to-face annual meeting in August (replaced by a virtual meeting on August 27).

Future Western Zone interim meetings are currently scheduled as follows:

- May 13–15, 2021 Bozeman, Montana
- May 19–21, 2022 Stateline, Nevada
- 2023 New Mexico
- 2024 Oregon

Negotiations and contracts are already in the works for 2021 and 2022, and our Site-Selection Committee will discuss whether to consider joint interim meetings in 2023 and 2024.

The Western Zone Awards Committee received several nominations for recognition of distinguished service to the Western Zone. Congratulations to Colin Maynard, P.E. (AK) for receiving this award. He will be recognized the next time we hold a zone meeting.

The Nominations Committee received the following nominations:

- Western Zone nominee for 2020–21 NCEES president-elect: Brian Robertson, P.E. (CO)
- 2020–22 vice president: Scott Bishop, P.S. (UT) and Karen Purcell, P.E. (NV)
- 2020–22 assistant vice president: Mohammad (Dr. Q) Qureshi, Ph.D., P.E. (CA)

A vote by ballot will be held in July to select the Western Zone nominee for president-elect and the new Western Zone officers; the ballot will also include a place to vote for the new NCEES treasurer. The election results will be announced during a virtual NCEES business meeting on August 27.

Considering our centennial anniversary, this year I challenged our Western Zone jurisdictions to review obstacles to mobility—but with a twist. Rather than looking internally (and generally seeing no barriers), each jurisdiction agreed to look at a different board's rules, regulations, and (in a few cases) application processes for comity licensure. We each then sent a report to the other board with the findings so that each could discuss and include any results in their annual jurisdiction reports.

I was honored to be invited to visit all of the Western Zone boards at one of their regular meetings during my term. With the expanded budget to support these leadership visits, I was able to visit 10 of our 15 boards (not counting my home board of Colorado). In my first year, I visited Arizona and Oregon; this year, I visited Guam, Wyoming, Utah, Nevada, Montana, Idaho, and Alaska and held a virtual meeting with California. Scheduled visits to the Northern Mariana Islands and New Mexico were both postponed due to weather (one typhoon and one snowstorm—guess which was which). I currently have visits scheduled for Hawaii, New Mexico, and Washington. The next opportunity to visit the Northern Mariana Islands is not until October, after my term expires. I will defer to my successor for that visit but will be happy to go if he or she is unwilling or unable to do so.

Finally, I would like to repeat my sincere gratitude to all members of the Western Zone for their support and eagerness to step up, get involved, and help this organization succeed. It is an honor to represent all of you on

the board of directors. It has been my pleasure to work with Assistant Vice President Scott Bishop, P.S. (UT) and Secretary Richard (Ric) Moore, P.L.S. (CA).

The 2019 Western Zone draft of the annual meeting minutes is available for download on the MyNCEES portion of the NCEES website by August. The zone will approve the minutes the next time we meet.



Chief Executive Officer's Report
David Cox

NCEES staff is committed to supporting the member boards in protecting the public through engineering and surveying licensure. This report highlights some of our efforts in 2019–20 to implement and support various NCEES initiatives.

COVID-19 response

The coronavirus disease 2019 (COVID-19) pandemic has been a disruption to NCEES services and a significant concern regarding the safety of our staff, volunteers, examinees, and meeting attendees. NCEES staff and leadership have worked diligently to develop and execute plans that focus on the safety of individuals as well as continuity of service for NCEES programs. Our guide in all deliberations on the COVID-19 response has been, What is the right thing to do for the least impact on examinees, customers, and employees?

Pencil-and-paper exam administration

In response to the crisis, NCEES canceled the April 2020 administration of its pencil-and-paper exams across the United States and abroad. NCEES automatically refunded fees that registered examinees paid to NCEES. Exams that are offered only once per year in April will be offered during the October 2020 administration. We expect to have a significant increase in the number of examinees for the October administration. NCEES staff has been working with member boards and test sites to ensure that we have the appropriate capacity to accommodate the extra examinees. We have added an extra day—Thursday, October 22—to the October 2020 pencil-and-paper exam administration to accommodate more examinees. We also opened registration for the October exams two weeks early, on June 1, to allow examinees extra time to register.

While we have some data about the financial impact of this cancellation, the final impact is still being assessed. For the April 2020 pencil-and-paper exam administration, NCEES refunded approximately \$5.5 million collected from 15,600 examinees. The bulk of this sum—\$4.1 million in registration fees—would have been recognized as revenue in May but is lost revenue for the year. We anticipate that many April 2020 examinees will register for the October 2020 administration, but we will not recognize that revenue until the 2020–21 fiscal year. The remaining \$1.4 million is from exam administration fees previously recognized as revenue for this fiscal year. In short, this is part of the exam registration fees that we report as revenue when it is collected, as opposed to the rest of the fees, which are reported as revenue when the exams are actually administered. When registration for the October exam opens in June, we anticipate that NCEES will recoup a significant portion of this total when April examinees register for the October exam.

NCEES did not incur the anticipated expenses of approximately \$1.1 million for the April 2020 exam. However, because we expect an increase in examinee volume in October 2020, those costs will defer to later in this fiscal year for additional site rental, security, proctor, and other expenses related to the October exam. We anticipate that those additional October 2020 expenses will be less than the \$1.1 million, but we do not have sufficient data to estimate at this time.

Computer-based testing (CBT)

Pearson VUE canceled computer-based exams at its professional test centers across the United States and Canada from March 17 to April 30. These closures affected the administration of NCEES computer-based exams, including the Fundamentals of Engineering (FE), Fundamentals of Surveying (FS), and Principles and Practice of Surveying (PS) exams as well as the Principles and Practice of Engineering (PE) Chemical, Environmental, and Mechanical exams. Pearson VUE select test centers on college or university campuses were subject to closure at the school's direction, as these institutions own and operate these test centers. Many Pearson VUE test centers outside the United States and Canada also limited or suspended their testing capacity in response to local COVID-19 circumstances. CBT examinees impacted by Pearson VUE test center closures can reschedule exam appointments at no charge.

The data to properly assess the financial impact of these closures is not yet available. However, from March 17 to April 30, approximately 10,000 appointments at Pearson VUE professional test centers were rescheduled or canceled.

NCEES meetings

To protect the safety of volunteers and staff, NCEES canceled meetings from March 15 to at least the end of August. This includes 10 exam development meetings as well as the combined zone interim meeting, which had been scheduled for April 23–25 in Houston.

The board of directors decided to cancel the August face-to-face annual meeting. In its place, NCEES is holding the annual meeting virtually as follows:

- June 17: Webinar with reports from the president and CEO
- June 24: Webinar with reports from the treasurer and CFO regarding proposed budgets
- July 1: Webinar on the elections, how to complete the ballot, and announcement of service award recipients
- June 29–July 31: Votes by ballot (one per board) on elections and essential Council motions
- August 27: Virtual annual meeting business session to provide results of the elections and votes on the motions

The NCEES Engineering Education Award and NCEES Surveying Education Award deadlines were scheduled for May 2020, and the jury meetings were set for June 2020. With many college campuses closed, NCEES decided to cancel the awards this year. We are encouraging programs that wanted to enter projects in 2020 to enter them for the 2021 cycle. Information on the 2021 awards will be available in October.

NCEES operations

NCEES headquarters closed on March 18 to help contain the spread of the virus. All staff began working remotely at this time. NCEES remote operations are continuing through at least July 6. We continue to serve our stakeholders and customers through the chat feature of our NCEES website and via email.

While we certainly did not envision a global pandemic impacting our operations, NCEES reserves will help us weather the financial losses. Having a healthy reserve fund has allowed NCEES to refund more than \$5 million to examinees, and, if needed, it will allow the organization to continue day-to-day operations during a period of reduced cash receipts. This crisis has shown the wisdom of preparing for disasters that seem more likely—such as an exam breach—as well as those that seem unthinkable. With our healthy reserves, NCEES can withstand a sustained, multifaceted crisis or even more than one crisis at a time.

Headquarters relocation

We received the certificate of occupancy for the new headquarters building in Greenville, South Carolina, and officially moved our headquarters from Clemson the week of May 25. The COVID-19 pandemic created some supplier delays, but we were fortunate that the move was only delayed about three weeks due to the great work of NCEES staff, LS3P Associates LTD (our architects), and Denham-Blythe Company Inc. (our general contractor).

The old headquarters building in Clemson is being sold to an entity associated with Clemson University. The closing is scheduled for June 30. NCEES must have the building cleaned and prepped for transfer no later than July 15.

The ribbon-cutting ceremony to celebrate the new NCEES headquarters was originally planned for May 28. In light of the COVID-19 response, we postponed this event. We are planning to reschedule the ceremony for this fall. We look forward to settling staff into the new space and to welcoming others, including our member boards and exam development volunteers, at our new headquarters soon.

Centennial celebration

The year 2020 is the 100th anniversary of the founding of NCEES. We have been acknowledging this significant milestone throughout the year through social media posts and *Licensure Exchange* articles focused on historic events in the Council's past. The location of the face-to-face annual meeting was selected to celebrate the first annual meeting, which was held in 1920 in Chicago. Though the COVID-19 pandemic has forced us to change those annual meeting plans and have a virtual meeting instead, we are still honoring this significant moment as well as the accomplishments of NCEES and its member boards over the last 100 years.

NCEES staff will launch a website this summer focusing on our 100-year anniversary. The site will highlight the accomplishments of NCEES over the last century. Staff is also spearheading efforts to publish a new edition of the *History of NCEES*, which is being updated to include Council activities from 2005 to 2020. It is scheduled to be published this winter. Finally, we are creating an NCEES history traveling exhibit, which will be available in late 2020.

Throughout 2020—the anniversary of the NCEES' founding—we will continue to mark this important point in our organization's history and to honor the contributions of its members over the years to fulfill its mission. We will also continue the recognition of this milestone next year, when we hold the 100th business meeting of the Council in August 2021.

Threats to public protection

NCEES is committed to helping its member boards safeguard the public. Our involvement with the Alliance for Responsible Professional Licensing (ARPL) is a key way that NCEES is addressing efforts to weaken licensure's protections for the public. NCEES also began initiating direct support for lobbying.

ARPL

NCEES is a founding member of ARPL, a coalition of national associations that represents highly complex, technical professions and their national licensing boards. Launched in July 2019, ARPL was created to ensure that a unified voice for the advanced professions is present and heard in the growing debate around the appropriate level of licensure for professions and occupations.

ARPL is engaging on two levels. First, it is a central communications committee, providing template support materials and general communications tips and tools that anyone can use. Second, it coordinates with partners in priority states to offer an amplified presence through media outreach, paid advertising, and other communication tools as needed.

As the professional licensing debate intensifies, it is vital for lawmakers to hear our concerns and for us to speak with a unified voice. ARPL has created a central communications resource for tools and ideas to support member boards' education and advocacy efforts on the ground.

Member boards can access these resources through the Advocacy Resources section of the NCEES website at ncees.org/resources. This resource provides member boards with a variety of tools in one location. These tools include the following:

- Sample letters to the editor and social media posts that can be customized as needed
- Videos promoting professional licensure and the important role of licensing boards
- Legislator outreach, talking points, and handouts
- Research results

This year, NCEES will also post resources that allow users to track legislation and regulations that could impact professional licensure across the United States.

In addition to these efforts, ARPL has been drafting newspaper op-eds and letters to the editor in select cities and states to counter incorrect information regarding professional licensure. ARPL is also working with select journalists across the country to ensure that our voice and position are heard. As lawmakers debate the extent of licensing needed—or if it is needed at all—we will work to ensure that the public's health, safety, and welfare are considered.

ARPL members have participated in panel discussions, interviews, and a variety of other platforms to get our message out to the public and legislators. In February 2020, I participated in a Council on Licensure, Enforcement, and Regulation podcast, where these issues and concerns were discussed.

Research is a key part of the ARPL plan. In February, ARPL released research on public support for professional licensing for public protection. The survey, which was conducted by Benenson Strategy Group, yielded the following key findings:

- 75 percent of voters believe that it is important to ensure qualifications for professionals in certain industries. A majority of voters believe that current professional licensing requirements protect the public and should not be reformed.

- More than 70 percent of voters believe that regulating professionals in accounting, engineering, architecture, landscape architecture, and related fields with a high impact on public safety and welfare is important.
- 71 percent of voters believe professional licensing should be required unless it can be proven that eliminating licensing will not have a negative effect on public health and safety. The public is wary of the alternative approach: requiring licensing only when it is proven necessary for health and safety.
- 67 percent of voters believe that consumers are best protected by a system that regulates education, examination, and experience standards—all of which are overseen by a professional licensing board.

The survey summary is available in the News section of the ARPL website, responsiblicensing.org.

Future research will include a follow-up to the survey and a study of the economic impact of professional licensure. Other groups opine that licensure has a negative economic impact and costs the economy jobs. ARPL wants to develop a plan and fund impartial third-party research on this topic.

NCEES direct support for lobbying

In addition to supporting the work of ARPL, NCEES is helping member boards combat threats to public protection with more-direct assistance.

After receiving a request from the Arizona State Board of Technical Registration for lobbying assistance on a bill that would amend the definition of the practice of engineering and allow unlicensed practice, the NCEES board of directors developed a set of procedures to guide any future lobbying efforts. The board of directors approved the following procedures at its February 2020 meeting:

- Involvement must be at the request of a member board.
- The legislation or proposed legislation must be related to engineering and/or surveying and represent a direct threat to NCEES' mission and vision.
- The situation must be such that lobbying efforts by professional societies would be detrimental.
- The CEO will review the request and related research and decide whether NCEES should consider a lobbying effort. If so, the information and recommendation will be forwarded to the president.
- If the president concurs, the information and recommendation will be forwarded to the full board of directors for consideration.
- If a majority of the board of directors approves, the CEO will proceed. If not, no lobbying efforts will be undertaken.
- The board also directed that \$100,000 be added to next fiscal year's proposed budget to fund lobbying efforts but that in no case will membership fees be used for these activities.

Can NCEES lobby?

Lobbying is defined as "attempting to influence legislation." To be considered to be "lobbying," a communication must refer to and reflect a view on a specific legislative proposal or legislation that has been introduced before a legislative body. If the communication does not refer to specific legislation, it is considered to be "advocacy." Advocacy and education do not fall within lobbying.

There are many misconceptions about what 501(c)(3) organizations such as NCEES can and cannot do when it comes to lobbying and political activities. According to the IRS, "no organization may qualify for section 501(c)(3) status if a substantial part of its activities is attempting to influence legislation (commonly known as lobbying)." Such an organization may engage in some lobbying, but too much lobbying activity risks loss of tax-exempt status. Therefore, the answer is yes, an organization such as NCEES may lobby.

Based on our level of expenditures, NCEES could spend up to \$1 million in lobbying activities without consequence. The potential penalty under this option is having to pay tax on any amount spent for lobbying over \$1 million. Tax-exempt status is not at risk unless an organization spends 50 percent more than the allowed amount for four years in a row. This is obviously not a concern for our organization. NCEES will file a one-time election during this tax year to choose this option.

In summary, NCEES can be involved in lobbying for specific pieces of legislation, education, and advocacy. What it cannot do under any circumstances is donate to individual campaigns, endorse or oppose candidates, or post anything on social media related to individual candidates. NCEES has not done this in the past, and future lobbying activities will not change that.

CBT expansion

Staff and volunteers continue the conversion of NCEES exams to CBT. The FE, FS, and PS exams have already transitioned to CBT. Transitioning the many PE exam disciplines to CBT is an ongoing initiative for NCEES.

The following NCEES exams joined the lineup of CBT exams in 2019–20: PE Petroleum exam (October 2019) and three disciplines of the PE Mechanical exam (April 2020). We are preparing for the first CBT administrations of the PE Fire Protection and PE Industrial and Systems exams in October 2020. These exams joining the CBT lineup brings the total computer-based PE exams to nine.

The timetable for the transition of the remaining 15 PE exams to CBT is posted online at ncees.org/cbt. The timetable also notes the format and administration schedule for each exam. Based on the current schedule, NCEES should complete the conversion of its exams to CBT in 2024.

Services to support the licensure process

In addition to developing licensing exams, NCEES staff continued to support the licensure process through its Member Services department. This includes the Records program, Continuing Professional Competency Tracking, Exam Administration Services, and the Credentials Evaluations Service.

The official statistics for all NCEES services, including member services and exam usage, are printed in the annual report and *Squared*. The latest editions, which cover fiscal year 2018–19, are available online at ncees.org/annualreport.

Outreach to promote the professions

In the fall and winter of 2019, NCEES participated in a number of initiatives to advance licensure for engineers and surveyors. NCEES supported these initiatives through financial resources as well as staff and volunteer time. The COVID-19 pandemic prevented participation in many outreach activities during the spring and summer of 2020.

DiscoverE

NCEES continued its support of DiscoverE to promote the professions and the importance of licensure to a wider audience. The organization sponsored the regional and national awards for Best Land Surveying Practices at the Future City Competition. Future City is a national competition in which teams of middle school students design and build cities of the future. Through the national and regional competitions, NCEES introduces more than 40,000 middle school students to the surveying profession each year. NCEES volunteers served as judges for the special award, which was presented at 40 regional competitions in January and at the national finals.

We continue to serve as a member of the DiscoverE Leadership Council. This group provides advice on education and workforce needs that DiscoverE can assist, and it provides DiscoverE materials and resources for volunteer organizations.

Engineers Without Borders USA (EWB–USA)

NCEES is completing the second year of its three-year \$3 million partnership with EWB-USA. This partnership includes a campaign to promote the value of licensure to EWB-USA's membership, which includes students, faculty advisors, mentors, and professionals.

The first year of the partnered campaign focused on conducting research, establishing benchmarks, and creating messages and campaigns.

The second year, which began in fall 2019, focused on promoting licensure to engineering and surveying students as well as unlicensed professional volunteers of EWB-USA. The partnership's first paid media campaign, "The Limit Does Not Exist," ran September–October 2019. The campaign delivered almost 7 million impressions, which is the number of times that social media users were shown this content. The projected exposure was 1.6 million impressions, so we far exceeded our estimates. Additionally, social media ads generated almost 34,000 clicks, which is the number of times that people clicked on one of the ads for more information. In conjunction with the paid media campaign, EWB-USA is continuously running a campaign through its own communications channels, including social media, email marketing, website, and print materials. This owned-channel campaign has reached more than 2 million people so far, including a reach of almost 900,000 people during Engineers Week in February. This fall, EWB-USA and NCEES will promote licensure through a series of on-campus events at various colleges and universities across the country.

Plans for the third year include expanding the campaign to target young professionals, members of EWB-USA's professional chapters, and mentors of its student chapters.

Working with EWB-USA will give us a greater reach than we have on our own, allowing us to promote licensure in new ways to new audiences.

In closing

This has been a challenging year, but it has also been a rewarding one. We have faced the uncertainty and disruption of the COVID-19 pandemic. We have also enjoyed the satisfaction of making significant progress on many NCEES initiatives as well as continuing to provide essential services during a time of crisis. As we celebrate the centennial of the founding of NCEES and prepare for fresh opportunities in our new headquarters, we look forward to moving into our second century of advancing licensure for engineers and surveyors.



Special Committee on Bylaws
Howard (Skip) Harclerode II, P.E., Chair

ABSTRACT

The 2019–20 Special Committee on Bylaws was established to provide revisions to the *Bylaws* based on actions by the Council at the 2019 annual meeting.

In February 2020, the committee emailed NCEES members and associate members to inform them that the proposed amendments to the *Bylaws* were posted online at MyNCEES/Member Resources/Board Resources. This notification was done in accordance with *Bylaws* 12.02, which requires member boards to be notified about proposed amendments to the *Bylaws* at least 60 days prior to the zone interim meetings.

Bylaws 12.02 states that voting shall be by sections and that changes to the published amendments will not be permitted during the annual meeting. An affirmative vote of two-thirds of boards present and in good standing is required to adopt amendments to the *Bylaws*.

The committee has five motions for Council action. The motions are shown beginning on page 27.

CHARGES

Charge 1

Review revisions to Bylaws 4.09, Board Audit Committee, as recommended by the Advisory Committee on Council Activities (ACCA) and approved by the Council at the 2019 annual meeting. Propose an amendment to add the Finance Committee chair to the committee and to state that the committee shall recommend for formal action by the full board of directors the audit results and final financial statement.

At the 2019 annual meeting, ACCA presented a motion for a Special Committee on Bylaws to be charged with modifying *Bylaws* 4.09. The motion passed, and the committee received Charge 1 as a result. It will present Motion 1 to amend the *Bylaws* accordingly. A rationale is included with the motion.

Charge 2

Review revisions to Bylaws 6.02, Quorum and Voting, as recommended by ACCA and approved by the Council at the 2019 annual meeting. Propose an amendment to state that voting by one member board on behalf of another member board not physically present in the meeting room at the time of the vote shall not be permitted.

At the 2019 annual meeting, ACCA presented a motion for a Special Committee on Bylaws to be charged with modifying *Bylaws* 6.02. The motion passed, and the committee received Charge 2 as a result. It will present Motion 2 to amend the *Bylaws* accordingly. A rationale is included with the motion.

Charge 3

Review revisions to Bylaws 10, Membership Fees, as recommended by ACCA and approved by the Council at the 2019 annual meeting. Propose an amendment to state that examinees may register and sit for NCEES examinations even when their NCEES member board is in arrears.

At the 2019 annual meeting, ACCA presented a motion for a Special Committee on Bylaws to be charged with modifying *Bylaws* 10. The motion passed, and the committee received Charge 3 as a result. It will present Motion 3 to amend the *Bylaws* accordingly. A rationale is included with the motion.

Charge 4

Review revisions to Bylaws 3.09 as recommended by the board of directors and approved at the 2019 annual meeting. Propose an amendment to align financial policies modified at the annual meeting with current practice in zone operations.

At the 2019 annual meeting, the NCEES board of directors presented a motion for a Special Committee on *Bylaws* to be charged with modifying *Bylaws* 3.09. The motion passed, and the committee received Charge 4 as a result. It will present Motion 4 to amend the *Bylaws* accordingly. A rationale is included with the motion.

Charge 5

Review the South Carolina resolution/motion presented at the 2019 NCEES annual meeting. Determine if any Bylaws changes are necessary, and provide recommendations to the board of directors as appropriate.

The Committee on Bylaws was charged with reviewing the South Carolina board resolution/motion presented at the 2019 NCEES annual meeting to determine if any *Bylaws* changes are needed to ensure that revisions to the NCEES Education Standards are presented to and approved by majority vote of the NCEES member boards. The committee determined that the best place to add pertinent language is in Section 7.04. It will present Motion 5 to amend the *Bylaws* accordingly. A rationale is included with the motion.

Respectfully submitted, the **Special Committee on Bylaws:**

Howard (Skip) Harclerode II, P.E., Chair

Members

Joseph Flynn, L.S.
Lisa Hanni, L.S.
Donna Sentell
Krista Wilson

Board liaison

Christopher Knotts, P.E.

Staff liaison

Davy McDowell, P.E.

MOTIONS

Bylaws Motion 1

Move that *Bylaws* 4.09 be amended as follows:

Section 4.09 Board Audit Committee. The President, President-Elect, Immediate Past President, ~~and~~ Treasurer, ~~and Finance Committee chair~~ shall comprise the Board Audit Committee. The Board Audit Committee shall annually select and recommend for approval by the full Board the accounting firm that shall conduct the annual financial audit and prepare the annual financial statements of NCEES. The Board Audit Committee shall also review ~~and approve and recommend for formal action by the full Board of Directors~~ the audit results and final financial statement ~~and~~. ~~The Board Audit Committee shall also~~ approve the engagement of other financial consultants as may be necessary to facilitate its review of NCEES finances. Members of the Board Audit Committee must be free from any relationship that, in the opinion of the Board, would interfere with the exercise of independent judgment. The Board Audit Committee shall have a working familiarity with basic finance and accounting principles and practices.

Rationale

The Special Committee on Bylaws received a charge to review changes to *Bylaws* 4.09 as proposed by the 2018–19 ACCA and approved by the Council at the 2019 annual meeting and to propose an amendment that updates the language as shown above. The 2018–19 ACCA rationale is as follows: “ACCA feels that the final approval of the annual financial audit should rest with the board of directors and not the Board Audit Committee. It is also proposing to add the Finance Committee chair to eliminate the potential of a tie vote.”

Board of directors' position

Endorses

Bylaws Motion 2

Move that *Bylaws* 6.02 be amended as follows:

Section 6.02 Quorum and Voting. A quorum for the transaction of business at the Annual Business Meetings of the Council shall be delegates from a majority of Member Boards. A majority vote of the Member Boards represented shall be required for affirmative action unless otherwise provided for in the *Bylaws*.

Only Member Boards shall be entitled to vote. Voting shall be by Member Boards, with each board entitled to one vote. If a Member Board is represented by more than one delegate present at the time of voting, the vote may be split proportionately if its delegates wish. An associate member may serve as a Member Board delegate for voting purposes only when so designated by the Member Board's chair through written, signed communication presented to NCEES staff prior to the opening session of the meeting. For Member Boards that require authorization from the state, such designation may come from the agency director for that board.

Voting by one Member Board on behalf of another Member Board not physically present in the meeting room at the time of the vote shall not be permitted.

Rationale

The Special Committee on Bylaws received a charge to review changes to *Bylaws* 6.02 as proposed by the 2018–19 ACCA and approved by the Council at the 2019 annual meeting and to propose an amendment that adds the language shown above. The purpose of the amendment is to clarify that member boards must be present to vote. The 2018–19 ACCA rationale is as follows: “ACCA feels that the use of proxy voting may have a detrimental impact on the attendance at zone interim and annual meetings and have negative consequences on the Council.”

Board of directors' position

Endorses

Bylaws Motion 3

Move that *Bylaws* 10.0125 be added as follows:

Section 10.012 Inactive Status. Any Member Board in arrears in membership fees 90 days prior to the Annual Business Meeting shall be placed in an inactive status by the Board of Directors. Member Boards in an inactive status shall not be entitled to vote. Individual members of Member Boards may not hold office or serve on committees. Representatives of boards in inactive status may attend meetings of the Council and may have the privilege of the floor. To be reinstated to an active status and to all the rights and privileges pertaining thereto, an inactive Member Board shall pay all fees and assessments in arrears plus those that have accrued during such inactive status period.

Section 10.0125 Examinees. Examinees may register and sit for NCEES examinations even when their NCEES member board is in arrears.

Rationale

The Special Committee on Bylaws received a charge to review changes to *Bylaws* 10 as proposed by the 2018–19 ACCA and approved by the Council at the 2019 annual meeting and to propose an amendment to add the language shown above. The 2018–19 ACCA rationale is as follows: “ACCA is proposing this motion to clarify exam access to examinees when a member board is in inactive status. *Bylaws* 10 does not currently address exam access for examinees when an NCEES member board is in arrears with membership fees. Member boards rarely go into arrears, and examinees should not be penalized for the actions of a member board.”

The Bylaws Committee determined that the new language should be added as a subsection of Section 10.012, Inactive Status, which is shown for reference.

Board of directors' position

Endorses

Bylaws Motion 4

Move that *Bylaws* 3.09 be amended as follows:

Section 3.09 Zone Organization. Each zone shall adopt the *Zone Meeting and Continuity Guidelines* for its organization and operation consistent with and in conformity to the NCEES *Bylaws*.

Each zone shall submit copies of its minutes ~~and an annual financial statement~~ to the Council at the Annual Business Meeting of the Council. Each zone shall elect an Assistant Vice President who shall serve a two-year term concurrent with the Vice President. The Assistant Vice President shall assist the Vice President, shall perform the duties outlined in the *Zone Meeting and Continuity Guidelines*, and shall perform all duties of the Vice President in the event that the Vice President is unable to perform for any reason. This shall include fulfilling the duties as Vice President on the Board of Directors.

Each zone shall elect a Secretary-Treasurer. Members and associate members shall be eligible to hold the office of Secretary-Treasurer. The Secretary-Treasurer shall keep and have published zone minutes; ~~and maintain records of zone activities; and handle zone financial affairs under the direction of the Vice President.~~

Administration of the financial affairs of the zone shall be consistent with those of the Council as governed by the Council's Articles of Incorporation and the *Bylaws*; ~~with submittal of financial statements as required.~~

Rationale

The Special Committee on Bylaws received a charge to review changes to *Bylaws* 3.09 as proposed by the 2018–19 NCEES board of directors and approved by the Council at the 2019 annual meeting and to propose an amendment to make the language consistent with Financial Policies 3 and 4, which were respectively amended and deleted at the 2019 annual meeting.

Board of directors' position

Endorses

Bylaws Motion 5

Move that *Bylaws* 7.04 be amended as follows:

Section 7.04 Committee on Education. The Committee on Education shall consist of a chair and two members from each zone. At least two members of the committee shall be professional surveyors. Committee appointments shall strive to include representatives from academia, private practice, industry, and government. The NCEES representatives to the ABET board of directors and Engineering Accreditation Commission shall be consultants to the committee. Other consultants shall be appointed as necessary.

The committee shall serve in an advisory role for education issues related to ABET, requirements prior to initial licensure, continuing professional competency, and foreign degree or unaccredited program evaluation. [The committee shall review the NCEES Engineering Education Standard and NCEES Surveying Education Standard annually and propose any revisions to the Council for approval at the Annual Business Meeting.](#) The committee shall review and update the *Continuing Professional Competency Guidelines* as necessary, but at least every five years.

Rationale

The Special Committee on Bylaws was charged with reviewing the South Carolina board resolution/motion presented at the 2019 NCEES annual meeting to determine if any *Bylaws* changes are necessary to ensure that revisions to the NCEES Education Standards are presented to and approved by a majority vote of the NCEES member boards. The Committee on Bylaws is proposing to add the language shown above to address this issue.

Board of directors' position

Endorses

Board of Directors Motions

Note: These motions were placed on the ballot that was sent to NCEES member boards to vote on in July 2020. The board of directors endorses both motions so that the organization does not have to wait another year to be considered and the guidelines can be updated immediately.

Board of Directors Motion 1

Move to approve the application of the American Society of Plumbing Engineers to become a member of the NCEES Participating Organizations Liaison Council (POLC).

Board of directors' position

Endorses

Board of Directors Motion 2

Move to ratify the proposed amendment to the NCEES *Zone Meeting and Continuity Guidelines* as shown below to clarify that only member boards may make nominations.

Nominating Committee

The committee shall

- Be named by the vice president and be composed of a chair and no fewer than three member representatives selected from among the remaining zone member boards. Committee members shall commence their responsibilities at the conclusion of the next NCEES annual business meeting following their appointment.
- Recommend nominees for vice president and assistant vice president at the interim meeting in accordance with the schedule set therefore by the NCEES *Bylaws*
- Recommend nominees for the secretary-treasurer at the interim meeting in accordance with the schedule established in these guidelines
- Nominate a candidate for president-elect every fourth year from eligible members of zone member boards and shall do so in accordance with related provisions of the NCEES *Bylaws*. The committee may, in its discretion, also nominate a candidate for the office of NCEES treasurer.
- By January 15 of each year, canvass the member boards for nominations for these positions. [Nominations may only be made by a member board.](#) The deadline for nominations to be submitted to the committee shall be at least 60 days prior to the zone interim meeting.
- Conduct its business prior to the next zone interim meeting following appointment
- Present nominations at the interim meeting, at which time additional nominations from the floor may be made. Nominations from the floor shall require two seconds, each by boards other than the nominating board. Before the election is held, the committee shall ensure that nominees meet the requirements for the position. When an office or position is being contested at the interim meeting, the nominee shall be allowed to address the zone and respond to questions from the floor.
- Serve as tellers during an election in which a national office is being contested at an interim meeting. The final zone nominations for president-elect and the final election results for zone officer positions shall be transmitted by the vice president to the NCEES CEO no later than 60 days prior to the opening date of the next annual business meeting.

Board of directors' position

Endorses



Committee on Finances
Andrew Zoutewelle, P.L.S., Chair

ABSTRACT

The Committee on Finances was established under the NCEES *Bylaws* to study the financial needs of NCEES, recommend sources of income, recommend ways and means of securing adequate funds for the proper operation of NCEES, and assist the board of directors in financial matters. The committee reviews the previous year's budget performance and recommends the next year's budget.

The committee will propose two motions for the Council to approve by ballot this year and developed three additional motions that will be addressed next year. The motions begin on page 34.

CHARGES

Charge 1

Review the results of the 2018–19 financial audit and the current financial condition of the Council, including the recommended operating and capital budgets.

The committee reviewed and accepted the independent auditor's report and financial statements for the 2018–19 fiscal year. No concerns or irregularities were identified. The committee also reviewed the February financial statements for fiscal year 2019–20 and noted that the year-to-date results are favorable to the budget due to better-than-anticipated exam volumes, including strong pencil-and-paper exam volumes. The committee will present Motions 1 and 2 as a result of this charge.

Charge 2

Continue to monitor the revenue and cost trends throughout the transition of all exams to computer-based testing (CBT).

The committee reviewed the volume trends for exam registration fees: administered exams; scheduling of exams; and rescheduled, canceled, and expired exam appointments. The volumes for the Fundamentals of Engineering (FE) and the Fundamentals of Surveying (FS) exams, both of which have already transitioned to CBT, appear to be trending in a positive direction. FE exam volumes have finally reached pre-CBT levels. The Principles and Practice of Surveying (PS) exam volume appears to have stabilized after its transition to CBT. The pencil-and-paper Principles of Practice of Engineering (PE) exam volumes have exceeded budgets due to decoupling experience requirements from the timing of when examinees are allowed to take the professional exams and due to upcoming transitions of certain PE exams to CBT.

The committee noted that staff is comfortable with the existing exam volume trends. It also noted that exams that have transitioned to CBT to date have experienced a decline in volumes for the first few years under the new format. The committee discussed that the examinee population may eventually become accustomed to the CBT format, which may potentially lessen this phenomenon. However, the committee concluded that there continues to be uncertainty about the level of exam volumes with the transitions of the two largest PE exams—the PE Mechanical exam (transitioned to CBT in April 2020) and PE Civil exam (scheduled to transition to CBT in 2023). The committee recommends continued monitoring of trends as these additional PE exams transition to CBT. In addition, the committee recommends that the Committee on Finances be charged with analyzing the financial impact of the upcoming PE Civil exam in preparation for its transition to CBT. The committee has no motions as a result of this charge.

Charge 3

Study the financial needs of the Council, recommend sources of income and ways and means of securing adequate funds for the proper operation of the Council, assist the board of directors in assessing the financial year's budget performance, and report these findings to the Council.

After reviewing the current financial condition of the Council, the committee concluded that current revenue streams appear to have generated adequate funds for the operation of the Council, including the requirements of the three reserve accounts: (1) exam breach, (2) annual operating budget, and (3) funds available for the NCEES mission. The committee discussed potential sources of income and expense reductions. It also discussed fiscal effects of the recent reduction in the FE and FS exam fees as well as potential changes to the expenses of operating the new headquarters property. The committee recommends no changes at this time.

Charge 4

Recommend a 2020–21 budget for the board of directors to approve before it is presented to the Council for final approval at the annual meeting.

The committee reviewed the income and expense budget for 2020–21. It discussed CBT exam revenue and direct expenses, including the upcoming PE exam transitions to CBT, the member board membership fees, and various other expense items as presented. No other changes to the current budget prepared by staff were originally recommended. The committee also discussed the capital budget and recommended no changes. However, after the committee's face-to-face meeting, staff presented the committee with a revised budget due to the impact of COVID-19 and cancellation of the April 2020 exam administration. The budget was then revised to account for larger exam volumes for the October 2020 exam administration. The operating budget, as amended, and capital budget are included in **Appendices B and C** of this report.

Charge 5

Review Financial Policy 8, Unbudgeted Expenditures. Propose an amendment to increase the approval amounts as appropriate.

The committee discussed the existing approval amounts for unbudgeted expenses, including up to \$7,500 with the approval of either the CEO, the president, or the treasurer; between \$7,500 and \$15,000 with the approval of two of those persons; and more than \$15,000 with the approval of the full board of directors. The committee discussed the relative size of the current annual expenses of the Council and the new expenses associated with owning and operating the new headquarters building and parking lot. As a result, the committee recommends these existing amounts (\$7,500 and \$15,000) be increased to \$25,000 and \$50,000, respectively. The committee developed Motion 3 as a result of this charge.

Charge 6

Review Financial Policy 3, Travel Expenses. Propose an amendment to include funding of NCEES ABET representatives to the annual meeting, per current practice.

The committee discussed that, historically, NCEES has funded attendance at the NCEES annual meeting for the following individuals:

- NCEES representative to the ABET board of delegates
- Alternate NCEES representative to the ABET board of delegates
- NCEES commissioners on Engineering Accreditation Commission of ABET, the Engineering Technology Accreditation of ABET, and the Applied and Natural Science Accreditation Commission of ABET

The committee recommends amending FP 3 to add these individuals to the NCEES-funded attendees to the annual meeting. The committee developed Motion 4 as a result of this charge.

Charge 7

Review Financial Policy 5A, Guests of Annual Business Meeting. Propose an amendment to state that the registration fee for the guest of each society president be waived, per current practice.

The committee discussed that, historically, NCEES has waived its annual meeting registration fees for presidents and executive directors of various professional societies. The committee discussed that Financial Policy 5A states

that the registration and activity fees may be waived. The committee recommends the following revisions to FP 5A:

- Identifying the president or president-elect, as appropriate, and the executive director of the professional society as guests of the Council
- Stating that all or part of the registration and activity fee shall be waived, per current practice.

The committee developed Motion 5 as a result of this charge.

Charge 8

Review the NCEES Travel Policy to determine if a statement should be added regarding travelers' expenses incurred due to delayed or lost luggage.

The committee discussed that airlines already have policies for addressing lost and delayed luggage, the subjectivity associated with how reimbursement might work in specific situations, and that an NCEES provision already exists for certain limited reimbursements in special circumstances. The committee recommends that no change be made to the *NCEES Travel Policy* as a result of this charge. During discussion, the committee suggested that the *NCEES Travel Policy* be incorporated into or referenced within the financial policies and that this suggestion be addressed in a future charge to the committee.

Charge 9

Work with the Committee on Examinations for Professional Surveyors to estimate exam fees if and when the PS examination transitions to a multidivisional examination.

The committee discussed that the multidivisional examinations that are currently proposed have not yet been developed to the point at which certain criteria related to setting exam fees are known (e.g., length of the divisional exams and the extent of exam development needed to implement each divisional exam). As a result, the committee is unable to estimate exam fees until additional progress is made by the Committee on Examination Policy and Procedures. The committee recommends that this charge be continued next year.

Respectfully submitted, the **Committee on Finances:**

Andrew Zoutewelle, P.L.S., Chair

Members

Steven Arndt, Ph.D., P.E.
Brian Berg Jr., P.E.
Alton Hethcoat II, P.E.
Ivan Hoffman Jr., P.S.
Robert Norton, P.E., L.S.
Dale Sall, P.E.
Robert Stockton, P.E.
Leonard (Joe) Timms Jr., P.E.

Ex officio

Christopher Knotts, P.E.

Board liaison

Timothy Rickborn, P.E.

Staff liaison

Betsy Pearson, CPA

MOTIONS

Note: As described in the introduction on page 1 of the Action Items and Conference Reports, the Council will vote by ballot on only essential motions during July. Therefore, it will vote on Motions 1 and 2 to approve the budgets for the 2020–21 fiscal year but will not vote on Motions 3–5. Instead, the 2020–21 Committee on Finances will be charged with reviewing this 2019–20 committee report and the draft Motions 3–5 below.

Finance Motion 1

Move to adopt the 2020–21 proposed operating budget as shown on pages 37–42 of the *Action Items and Conference Reports*.

Board of directors' position

Endorses

Finance Motion 2

Move to adopt the 2020–21 proposed capital budget as shown on page 43 of the *Action Items and Conference Reports*.

Board of directors' position

Endorses

Finance Motion 3

Move that Financial Policy 8 be amended as follows:

FP 8 Unbudgeted Expenditures

Necessary expenditures to carry on the business of the Council that are not in the current operating or capital budget shall have prior approval of either the chief executive officer, the president, or the treasurer for amounts up to ~~\$7,500~~ **\$25,000**. Expenditures of more than ~~\$7,500~~ **\$25,000** and up to ~~\$15,000~~ **\$50,000** shall have prior approval of two of the above persons, and expenditures in excess of ~~\$15,000~~ **\$50,000** shall have the prior approval of the board of directors. Any expenditures not in the current budget shall be reviewed by the board of directors at its next meeting.

Rationale

The committee discussed that the approval levels have not been revised since 2008 and that approval levels should be increased so that the Council's operations and capital needs would not be delayed should an emergency or other unanticipated expenditure occur.

Finance Motion 4

Move that Financial Policy 3B be amended to add section 8 as follows:

FP 3 Travel Expenses

NCEES shall budget for and pay travel expenses for NCEES-funded meeting attendees as described below. NCEES shall also waive the registration fee for NCEES-funded attendees to the annual meeting and zone interim meetings but shall not pay the cost of optional functions that are not included in the registration fee. All authorized travel and reimbursements shall be in accordance with the NCEES travel policy. Unbudgeted international travel shall require authorization by the board of directors.

B. NCEES annual business meetings

1. Members of the current NCEES board of directors, incoming vice presidents, nominees for the incoming NCEES president-elect and treasurer positions, and past presidents. Registration fees shall be waived for a guest of each.
2. A minimum of three funded delegates from each member board as specified by the member board. Member boards must meet the *Bylaws* requirements for voting to receive the benefits of funded delegates.
3. Member board members who are attending their first annual meeting and who have been appointed to their board within 24 months before the annual meeting
4. The designated member board administrator (MBA) of each member board. When an MBA represents more than one board, the funding shall be for the designated MBA only and not for the assistant MBA or for member board staff. Member boards must meet the *Bylaws* requirements for voting to receive the benefits of a funded MBA.
5. Chairs of NCEES standing committees and task forces

6. NCEES service award recipients. Registration fees shall be waived for a guest of each.
7. Zone assistant vice presidents and zone secretary-treasurers
8. The NCEES representative to the ABET board of delegates, the alternate NCEES ABET representative, and the commissioners on the Engineering Accreditation Commission of ABET, the Engineering Technology Accreditation of ABET, and the Applied and Natural Science Accreditation Commission of ABET

Rationale

The committee discussed that, historically, the Council has funded the ABET representatives identified in paragraph 8 above. Therefore, the committee is moving to add this language to FP 3 to reflect the current NCEES practice of funding for these meetings.

Finance Motion 5

Move that Financial Policy 5A be amended as follows:

FP 5 Guests of Annual Business Meeting

- A. The president is authorized to issue invitations to professional society presidents or presidents-elect, to professional society executive directors, to International Affiliate Organizations, and to Participating Organizations to attend the annual business meeting as guests of the Council. All or part of the registration and activity fee ~~may~~ shall be waived.

Rationale

The committee discussed that, historically, the Council has waived the registration fees of each professional society president and executive director. Therefore, the committee is moving to revise the language in FP 5A to reflect the current NCEES practice of waiving the registration fee.

APPENDIX A: OPERATING BUDGET SUMMARY

	2020-21 Total Budget	2019-20 Total Budget
INCOME		
Support Services Revenue	576,430	511,100
Examination Services Revenue	27,853,307	24,009,854
Member Services Revenue	<u>7,540,582</u>	<u>7,372,578</u>
Total Income	35,970,319	31,893,532
EXPENSES		
General and Administrative	8,126,687	7,486,640
Meetings and Outreach Services	4,522,485	4,619,554
Examination Services	19,051,381	17,473,951
Member Services	<u>3,798,303</u>	<u>3,472,435</u>
Total Expenses	<u>35,498,856</u>	<u>33,052,580</u>
NET OPERATING INCOME	<u>471,463</u>	<u>(1,159,048)</u>
NONOPERATING ITEMS		
Interest and Investment Income	1,346,450	1,217,384
Other Income	<u>—</u>	<u>602,794</u>
NET INCOME	<u>1,817,913</u>	<u>661,130</u>

APPENDIX B: 2020–21 PROPOSED OPERATING BUDGET

SUPPORT SERVICES REVENUE

Member Board Fees	421,400
Participating Organizations Liaison Council (POLC) Fees	7,800
Annual Meeting Fees	72,750
Other Meeting Fees	61,480
Miscellaneous Income	13,000
Total Support Services Revenues	576,430

SUPPORT SERVICES OPERATING EXPENSES

Officer/Staff Travel	
President	31,500
Past President	16,000
President-Elect	27,500
Central Zone Vice President	15,000
Northeast Zone Vice President	15,000
Southern Zone Vice President	15,000
Western Zone Vice President	15,000
Treasurer	14,000
Chief Executive Officer	49,000
Staff	34,014
International	65,000
Subtotal	297,014

Committee Travel and Expenses

Advisory Committee on Council Activities	14,000
Bylaws Committee	1,000
Finance Committee	19,750
Member Board Administrators (MBA) Committee	17,000
Law Enforcement Committee	16,000
POLC	14,000
Education Committee	19,000
Uniform Procedures and Legislative Guidelines Committee	16,000
Ad Hoc Committees	90,000
Subtotal	206,750

Annual Meeting

Staff Travel	47,187
Expenses	775,389
Publications	60,000
Award Recipient Travel	7,245
Awards and Presentations	10,591
Funded Delegate Travel	429,850
Subtotal	1,330,262

Board Presidents/MBA Assembly	159,775
MBA Meeting and Board Attendee	3,885
Zone Meeting Expenses	510,170
Meeting Registration Expenses	6,156

APPENDIX B: 2020–21 PROPOSED OPERATING BUDGET

Promotion and Outreach

Engineering Education Award	146,390
Surveying Education Award	120,684
Discretionary Outreach	500,000
Licensure Outreach	468,500
Marketing	737,500
Newsletter	35,400
Subtotal	2,008,474

Total Meetings and Outreach

4,522,486

GENERAL AND ADMINISTRATIVE

Personnel and Human Resources

Salaries	4,052,619
Payroll Taxes (FICA)	274,666
Payroll Insurance (State)	2,500
Group Insurance	407,582
Employee Retirement Fund	404,987
Recruiting	21,473
Employee Development	161,810
Subtotal	5,325,637

Office

Electricity	126,942
Water	11,673
Building Security	8,945
Building Maintenance	80,368
Cleaning and Ground Maintenance	97,709
Subtotal	325,637

Administrative

Postage	6,864
Supplies	37,605
Credit Card/Bank Fees	6,185
Administrative Printing	60,000
Strategic Planning	36,215
Noncapitalized Purchases	8,500
Subtotal	155,369

Technology Services

Communications	191,335
Equipment Lease/Rental	96,640
Software	168,440
Noncapitalized Purchases	102,360
Hardware Maintenance	13,000
Subtotal	571,775

Insurance and Bond

Travel	7,728
Building and Liability	13,628
Directors and Officers	18,304
Professional Liability	18,761
Workers' Compensation	17,709
Subtotal	76,130

APPENDIX B: 2020–21 PROPOSED OPERATING BUDGET

Dues and Professional Fees	
ABET Dues and Meetings	24,396
Federations of Associations of Regulatory Boards	8,528
Alliance for Responsible Professional Licensing	52,600
Other Memberships and Dues	6,840
Legal Fees	50,000
Audit and Payroll Fees	61,200
Lobbying	100,000
Other Professional and Consulting Fees	137,770
Subtotal	441,334
Depreciation and Interest	
Interest Expense	5,497
Equipment and Furniture Depreciation	833,557
Building Depreciation	391,750
Subtotal	1,230,804
Total General and Administrative Expenses	8,126,686
TOTAL SUPPORT SERVICES OPERATING EXPENSES	12,649,172
GAIN/(LOSS) FROM SUPPORT SERVICES	(12,072,742)
EXAMINATION SERVICES OPERATING REVENUE	
EXAMINATIONS	
Fundamentals of Engineering	11,238,750
Principles and Practice of Engineering	11,596,450
Structural Engineering	1,459,200
Fundamentals of Surveying	317,200
Principles and Practice of Surveying	225,138
Examination Regrading	8,475
Subtotal	24,845,213
STUDY MATERIALS	
Publication Sales	2,199,703
Postage and Shipping Revenue	808,391
Subtotal	3,008,094
TOTAL EXAMINATION SERVICES OPERATING REVENUE	27,853,307
EXAMINATION SERVICES OPERATING EXPENSES	
EXAMINATIONS	
Fundamentals of Engineering	
Computer-Based Testing (CBT) Seat Fees	7,893,161
Contracted Services	875
Psychometric Consulting Services	411,575
Travel	366,520
Subtotal	8,672,131

APPENDIX B: 2020–21 PROPOSED OPERATING BUDGET

Principles and Practice of Engineering	
CBT Seat Fees	1,339,095
Contracted Services	25,000
Psychometric Consulting Services	791,787
Printing	363,598
Travel	991,760
Subtotal	3,511,240
Structural	
Contracted Services	2,500
Psychometric Consulting Services	88,000
Grading	101,200
Printing	39,702
Travel	411,996
Subtotal	643,398
Fundamentals of Surveying	
CBT Seat Fees	220,741
Contracted Services	550
Psychometric Consulting Services	42,925
Travel	25,872
Subtotal	290,088
Principles and Practice of Surveying	
CBT Seat Fees	109,540
Contracted Services	575
Psychometric Consulting Services	45,413
Travel	32,340
Subtotal	187,868
Committee Travel and Expenses	
Examination Audit Committee Travel	13,490
Examination Audit Psychometric Services	8,000
Committee on Examination Policy and Procedures (EPP) Travel	16,055
Committee on Examinations for Professional Engineers (EPE) Travel	64,825
EPE Psychometric Services	25,856
Committee on Examinations for Professional Surveyors (EPS) Travel	48,571
EPS Psychometric Services	20,100
Subtotal	196,897
Examination Materials and Shipping	
Freight and Shipping	160,500
Printing and Distribution	65,000
ADA Consulting Expense	145,781
Meeting Registration Fees	6,948
Subtotal	378,229
Examination Development	
Principles and Practice of Engineering Development—Cut Scores	285,502
Principles and Practice of Engineering Task Analysis	98,245
Subtotal	383,747
Total Examination Expenses	14,263,598

APPENDIX B: 2020–21 PROPOSED OPERATING BUDGET

STUDY MATERIALS	
Publication Printing Expense	440,742
Digital Product Expense	50,000
Postage and Shipping Expense	808,391
Total Study Materials Expenses	1,299,133
OTHER DIRECT EXPENSE	
Salaries (Direct)	2,233,561
Payroll Taxes (Direct)	164,894
Benefits and Retirement (Direct)	499,679
Credit Card Processing (Revenue Ratio Allocation)	551,050
Compliance and Security	39,466
Total Other Direct Expenses	3,488,650
TOTAL EXAMINATION SERVICES OPERATING EXPENSES	19,051,381
GAIN/(LOSS) FROM EXAMINATION SERVICES	8,801,926
MEMBER SERVICES OPERATING REVENUE	
EXAM ADMINISTRATION SERVICES REVENUES	
Exam Administration Fees	2,586,711
NCEES RECORDS/CREDENTIALS EVALUATIONS SERVICES REVENUES	
Application Fees—Records	1,413,964
Transmittal Fees—Records	2,607,857
Application Fees—Credentials	908,950
Reevaluation Fees—Credentials	23,100
Total Records/Credentials Revenues	4,953,871
TOTAL MEMBER SERVICES OPERATING REVENUE	7,540,582
MEMBER SERVICES OPERATING EXPENSES	
EXAM ADMINISTRATION SERVICES EXPENSES	
Site Rentals	1,187,622
Proctor Expense	860,000
Security Guards	55,249
Secure Storage	177,458
Supplies/Miscellaneous	8,796
Postage and Shipping	7,518
Printing	4,706
Travel	59,298
Training	21,560
Total Exam Administration Services Expenses	2,382,207
NCEES RECORDS/CREDENTIALS EVALUATIONS SERVICES EXPENSES	
Postage and Shipping	1,000
Travel/Audit—Credentials	4,700
Electronic Transcript Services	5,000
Total Records/Credentials Expenses	10,700

APPENDIX B: 2020–21 PROPOSED OPERATING BUDGET

OTHER DIRECT EXPENSE	
Salaries (Direct)	962,078
Payroll Taxes (Direct)	73,333
Benefits and Retirement (Direct)	219,173
Credit Card Processing (Revenue Ratio Allocation)	150,812
Total Other Direct Expenses	1,405,396
TOTAL MEMBER SERVICES OPERATING EXPENSES	3,798,303
GAIN/(LOSS) FROM MEMBER SERVICES	3,742,279
OPERATION TOTALS	
TOTAL REVENUES	35,970,319
TOTAL EXPENSES	35,498,856
GAIN/(LOSS) FROM OPERATIONS	471,463
NONOPERATING ITEMS	
INTEREST AND INVESTMENT INCOME	
Interest and Investment Income	1,346,450
GRAND TOTALS	1,817,913

APPENDIX C: 2020–21 PROPOSED CAPITAL BUDGET

CAPITAL PURCHASES/LEASES

Equipment

Staff Computer Replacements	\$ 136,000
Miscellaneous Furniture, Fixtures, and Equipment	\$ 14,000
	\$ 150,000

Land Improvements

Charging Stations	\$ 50,000
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TOTAL	\$ 200,000
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Advisory Committee on Council Activities

Kelly Fedele, P.E., P.S., Chair

ABSTRACT

The Advisory Committee on Council Activities (ACCA) provides advice and briefing to the president and the board of directors on new policy issues, problems, and plans that warrant preliminary assessment of policy choices and procedures not yet assigned to a standing committee or involving several existing committees. ACCA conducted an organizational meeting at the 2019 annual meeting in Washington, D.C., and held a face-to-face meeting in January 2020 in Palm Springs, California, to finalize the work done prior to the meeting and to make recommendations to the Council.

ACCA was assigned seven charges. It developed three motions and has a recommendation. The motions begin on page 48.

CHARGES

Charge 1

Determine if NCEES needs a policy on the appointment of representatives attending meetings of and/or seeking office with the International Engineering Alliance (IEA) and related organizations. If so, draft language for the policy and present for Council approval.

ACCA discussed several options as recommendations for the board of directors to use when determining who would be allowed to attend meetings representing NCEES and/or seeking office with IEA and related organizations. ACCA felt that it should recommend policy to the board of directors since the board has determined who would attend and/or represent NCEES to date. The ACCA recommendations were as follows:

- NCEES will fund the NCEES president, president-elect, and chief executive officer to attend one IEA meeting or a related organization meeting annually.
- An individual seeking office with IEA or a related organization must have the approval of the NCEES board of directors to run for the office.
- When seeking election for the initial office of one of the organizations, the individual must be either a current NCEES member board member or a member of the NCEES board of directors. When seeking reelection to the office or seeking another international office, the individual must reobtain the approval of the NCEES board of directors.
- An individual seeking office with IEA or related organizations must be licensed as a professional engineer.
- An individual seeking office with IEA or related organizations must be willing to commit significant time resources for multiyear assignments.
- If an individual is elected to a leadership role with IEA or related organizations, all travel expenses to attend one meeting of IEA shall be funded in accordance with the approved NCEES Travel Policy.

After sharing these recommendations with the board of directors and receiving feedback, ACCA decided to present a motion to add a policy related to these appointments since NCEES has policies related to other society interface and delegates—such as Administrative Policy 10, NCEES/Professional Society Interface, and Administrative Policy 16, Delegates to ABET, Inc. The board reviewed the recommendations from ACCA and provided the following language to ACCA.

AP 19 Representatives to the International Engineering Alliance (IEA) and Related Organizations

- A. NCEES shall be represented at IEA and related organizations by the president, president-elect, and the chief executive officer. The president may, subject to approval by the board, appoint additional or substitute representatives.
- B. All travel expenses shall be funded in accordance with Financial Policy 3 and the NCEES Travel Policy.
- C. When seeking election or reelection to an office or an appointment to a committee or working group of IEA or related organizations, an individual must first obtain approval of the NCEES board of directors.

In reviewing the language, ACCA was opposed to including additional representatives that could be appointed. ACCA felt that it is not necessary for additional representatives to be appointed under any circumstance. Due to the financial cost of adding additional representatives, ACCA felt that the Council should have approval to add more than the three positions specifically mentioned in the policy.

ACCA developed Motion 1 as a result of this charge.

Charge 2

Review the Manual of Policy and Position Statements. Specifically, review all administrative policies, professional policies, and position statements. Determine if all of the position statements are necessary or if some of them are covered in other NCEES manuals. Recommend revisions as appropriate.

ACCA was charged with reviewing the entire policy manual. After completing that review and determining what policies would be addressed through other charges, the committee felt the financial policy on Council funds was the only one that needed clarification. ACCA shared the following recommendation with the 2019–20 Committee on Finances for discussion:

ACCA recommends that the language in Financial Policy 1, Council Funds, paragraph D, be revised to make it clear that the phrase “maximum of \$500,000 for funding of nonprofit organizations” means an overall total that the board of directors can contribute; in other words, it does not mean \$500,000 per nonprofit organization. This was the intent when the Council passed the motion at the August 2018 annual meeting. ACCA does not believe this needs to be a motion because it is only clarifying the language to reflect the intent of the Council when the language was originally added. NCEES can make the modifications when updating the manuals after this year’s annual meeting.

The language that would be modified is as follows:

FP 1 Council Funds

D. The NCEES board of directors shall have the authority to contribute a maximum of \$500,000 annually for funding of nonprofit organizations. [The \\$500,000 includes a total of all contributions \(not \\$500,000 per nonprofit organization\)](#). A full Council vote is required to approve contributions above that amount.

The Finance Committee reported back to ACCA that it would not make any changes to policies that were not specifically charged to it. The Finance Committee plans to conduct a full review of all financial policies in 2020–21 and will address ACCA’s recommendation during that review rather than having staff make the changes this year as ACCA originally recommended.

ACCA has no other recommendations related to this charge.

Charge 3

Review Bylaws 7.02, Advisory Committee on Council Activities, and determine if ACCA needs to review only the professional policy and position statement sections of the NCEES Manual of Policy and Position Statements. Recommend revisions as appropriate.

Each year, ACCA is charged with reviewing all policies and position statements to make sure that they are consistent and correct. It recommends that this charge be continued rather than limiting the review to only professional policies and position statements.

If ACCA finds any inconsistencies in or concerns with any policies, then it would refer these findings to the appropriate committee for review and for input back to ACCA. If ACCA is satisfied that the Finance Committee and standing exam committees have addressed the concern or inconsistency, then there would be no further action from ACCA. If ACCA is not satisfied with the action taken by the Finance Committee or standing exam committees, ACCA would have the right to propose a recommendation to the Council for direction.

Charge 4

Consider if Bylaws 3.021, Associate Members, and 3.022, Emeritus Members, should be amended to remove the conditional language, “upon approval of the presiding officer.”

Bylaws Section 3.05, Delegates, states the following: “A delegate shall be a member or an associate member designated by a Member Board to represent it at meetings of the Council. A Member Board may have as many

delegates as it has members but may cast votes only as prescribed. Any delegate shall have the privilege of the floor.”

At meetings of the Council, some NCEES associate members—often member board administrators (MBAs)—are designated as delegates and therefore have the privilege of the floor. The presiding officer may or may not know who has been designated as a delegate and deny or allow them the privilege to speak. An emeritus member would not be a delegate for a member board but may be a member of the Participating Organizations Liaison Council and have the privilege of the floor on approval of the presiding officer.

An ACCA subcommittee reviewed *Bylaws* 3.021, Associate Members; 3.022, Emeritus Members; and 3.05, Delegates. After its review, it recommended that *Bylaws* 3.021 and 3.022 be amended by striking the words, “upon approval of the presiding officer.” The rest of the committee agreed.

ACCA developed Motion 2 as a result of this charge.

Charge 5

Consider if the Bylaws should be amended to add a ninth seat on the NCEES board of directors to be filled by a member board administrator.

ACCA considered whether the *Bylaws* should be amended to add a ninth seat on the board of directors to be filled by an MBA. A similar charge was reviewed by ACCA in 2016–17, and that committee recommended against doing so. This year’s committee does not have new information that warrants a change to the previous committee’s recommendation.

The concerns were discussed at length at this year’s ACCA face-to-face meeting. The value of MBAs is not being debated. However, ACCA feels that the role of MBAs is primarily as policy implementers—not as policymakers, which is typically what members of the board of directors are. Likewise, MBAs are full-time employees of a member board or a state agency, with other duties and even other boards. Often, MBAs are hired or voted upon annually by the member board itself.

A potential conflict of interest could arise on a vote between the board of directors and a member board. This could place the MBA—who is a paid full-time employee—in a difficult position.

Member boards currently have an active voice with regard to Council business. In 2012–13, the Member Board Administrators Networking Group was changed to be a standing committee of the Council (the Committee on Member Board Administrators). Additionally, since the mid-2000s, an MBA has been invited to attend each board of directors meeting and report back to all other MBAs. Finally, almost every standing committee of the Council includes an MBA.

Based on this discussion, ACCA does not recommend a change to the current composition of the NCEES board of directors.

Charge 6

Consider whether the Model Law and Model Rules should be amended less often than every year, which is the current practice. Consider a schedule of every five years. Recommend revisions as appropriate.

The typical practice of the Council is for the Committee on Uniform Procedures and Legislative Guidelines (UPLG) to propose any changes to the *Model Law* and *Model Rules* at each annual meeting for Council approval. After UPLG’s proposed revisions are approved by the Council, the language revisions are immediately incorporated into the *Model Law* and *Model Rules*. The updated publications are available about a month after the annual meeting. ACCA considered the charge and engaged in spirited discussions.

Each year, there is at least one motion presented at the annual business meeting by a committee/task force to charge the UPLG Committee with considering and then proposing amendments to the *Model Law* and/or *Model Rules*. In addition, UPLG proposes amendments to the *Model Law* and *Model Rules* each year. If the Council passes these amendments, this then becomes an official act.

During discussion, ACCA noted that the *Model Law* and *Model Rules* have no legal standing in any jurisdiction (so questioned the need to continually make changes each year). Nevertheless, the consensus of ACCA is that when changes to the *Model Law* and *Model Rules* are enacted, they should be memorialized in a reasonable time frame. This would minimize confusion related to the question, “What has changed and when did it change?” ACCA therefore recommends no changes to the current practice.

Charge 7

Consider options for handling examinee irregularities in the case of boards that have selected an automatic approval model that allows for examinees to directly register with NCEES for examinations. Recommend revisions as appropriate.

Various NCEES documents (*NCEES Examinee Guide*, Exam Administration Policy 8, *Investigation and Enforcement Guidelines*, and *Security and Administrative Procedures Manual*) specifically separate exam irregularities into two categories—those that are subject to invalidation of exam results by NCEES and those that are subject to invalidation of exam results by a member board. As more and more member boards choose the automatic registration model (that is, the examinee is able to register and take an NCEES exam without the preapproval of a member board) and as NCEES moves into offering all exams by computer-based testing (CBT) only (which, due to the use of Pearson VUE test centers, reduces the involvement of the member board and allows the examinee to take the exam in any jurisdiction), an examinee may have only a tangential association with a specific member board prior to application for licensure (that is, all examinees currently must select a member board when registering). This makes the separation of exam irregularities as described above problematic.

ACCA, after consultation with NCEES staff, agreed that all exam irregularities should be evaluated by only NCEES with regard to invalidation of exam results. If a candidate fails to comply with the conditions stated in the *NCEES Examinee Guide*, then NCEES would have the authority to invalidate exam results and, furthermore, would have the authority to suspend a candidate’s ability to take an NCEES exam for up to three years. If deemed appropriate, NCEES would have the right to pursue additional restrictions on future testing, as well as civil and/or criminal remedies. These decisions shall be made by the appropriate NCEES staff.

ACCA developed Motion 3 as a result of this charge.

Respectfully submitted, the **Advisory Committee on Council Activities:**

Kelly Fedele, P.E., P.S., Chair

Members

Michael Conzett, P.E.
Gene Dinkins, P.E., P.L.S.
Dale Jans, P.E.
Colin Maynard, P.E., S.E.
John Mettee III, P.L.S.
Andrew Ritter
David Whitman, Ph.D., P.E.
David Widmer, P.L.S.

Board liaison

Dean Ringle, P.E., P.S.

Staff liaison

Donna Moss, SHRM-CP, PHR

MOTIONS

ACCA Motion 1

Move that Administrative Policy 19 be adopted as follows:

AP 19 Representatives to the International Engineering Alliance (IEA) and Related Organizations

- A. NCEES shall be represented at IEA and related organizations by the president, president-elect, and chief executive officer. The president may, subject to approval by the board, appoint substitute representatives.
- B. All travel expenses shall be funded in accordance with Financial Policy 3 and the NCEES Travel Policy.
- C. When seeking election or reelection to an office or an appointment to a committee or working group of IEA or related organizations, an individual must first obtain approval of the NCEES board of directors.

Rationale

As detailed in the discussion in Charge 1, ACCA feels that a policy needs to be added to the *Manual of Policy and Position Statements* to clarify the process for appointing representatives who attend meetings of and/or seek office with IEA and related organizations. It presented the NCEES board of directors with its specific recommendations. After receiving feedback from the board of directors, it decided to propose the language shown above.

ACCA Motion 2

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into *Bylaws* 3.021 and 3.022.

Section 3.021 Associate Members. An associate member of NCEES shall be a designee of a Member Board, but not a member of a Member Board, who is appointed by the NCEES Board of Directors as an associate member of NCEES.

Recommendations for associate members of NCEES shall be submitted by Member Boards to the Board of Directors and become effective upon appointment by the Board of Directors. Such appointments shall be reviewed annually by each Member Board and shall remain in effect until the Board of Directors is notified otherwise by the Member Board.

Associate members of NCEES shall have the privilege of the floor ~~upon approval of the presiding officer~~ and may serve on any committee to which duly appointed under the *Bylaws*. Associate members are eligible to hold the elective office of zone Secretary-Treasurer but are not eligible to serve on the NCEES Board of Directors.

Section 3.022 Emeritus Members. An emeritus member of NCEES shall be a person who is a former member of a Member Board who is duly recommended by that Member Board and approved by the NCEES Board of Directors. Such appointments shall be reviewed annually by each Member Board and shall remain in effect until the Board of Directors is notified otherwise by the Member Board.

Emeritus members of NCEES shall have the privilege of the floor ~~upon approval of the presiding officer~~ and may serve on any committee to which duly appointed under the *Bylaws*.

Rationale

Associate members are currently active in the Council and, through their attendance at the annual meeting, have the ability to participate and contribute to the discussion. Emeritus members are granted the privilege of the floor without having to request permission from the chair. As past board members, they have a knowledge of the Council and some historical perspective. Their best interest should be on the Council’s behalf. If someone who is not a delegate, associate, or emeritus member requests to speak, it should be up to the chair to decide if that individual will be allowed the floor.

ACCA Motion 3

Move that the appropriate committee be charged with incorporating the following language into the appropriate place within Examination Administration Policy 8.

EAP 8 Release and Use of Examination Results

All NCEES exam irregularities should be evaluated by NCEES with regard to invalidation of exam results. If a candidate fails to comply with the conditions stated in the *NCEES Examinee Guide*, then NCEES will have the authority to invalidate exam results and, furthermore, shall have the authority to suspend a candidate’s ability to take an NCEES exam for up to three years. If deemed appropriate, NCEES shall also have the right to pursue additional restrictions on future testing, civil remedies, and/or criminal remedies.

Rationale

As described in the discussion shown in Charge 7, making these changes will provide consistency in determining exam invalidation for examinees who violate the exam rules provided in the *NCEES Examinee Guide*. Member boards will no longer have to shoulder the responsibility for conducting investigations into exam irregularities. They will still be involved as the identity of any examinee whose results are invalidated, and the reason for invalidation will be noted in the NCEES Enforcement Exchange database.

If the Council approves a revision to EAP 8, the *NCEES Examinee Guide*, *Investigation and Enforcement Guidelines*, and *Security and Administrative Procedures Manual* will also be updated accordingly.



Committee on Awards
Robert Krebs, P.E., L.S., Chair

ABSTRACT

The Committee on Awards is charged with canvassing member boards for nominations for the service awards to be given at the annual meeting. These awards are the Distinguished Service Award, the Distinguished Service Award with Special Commendation, the Meritorious Service Award, and the Distinguished Examination Service Award. After receiving the nominations, the committee held a conference call to review nominees based on the criteria shown below. From these nominations, the committee recommended recipients for the board of directors to consider. The committee is guided by NCEES Administrative Policy (AP) 12, which is as follows:

AP 12 Awards

NCEES will officially recognize members, associate members, emeritus members, and other volunteers who provide or have provided outstanding service to NCEES. The members of the Committee on Awards and the board of directors shall not be nominated for these awards while serving on the Committee on Awards or on the board of directors. In evaluating nominations, the following guidelines are to be observed:

Distinguished Service Award

- Must be a current member, a former member, or an emeritus member
- Must promote engineering or surveying licensure at the state or national level
- Must demonstrate positive contributions to the advancement of the engineering or surveying profession and the mission and vision of NCEES
- May include participation in professional or technical societies as a consideration
- Must demonstrate active participation in member board activities
- Must include distinguished service on at least one NCEES committee
- May be nominated by a member board

Distinguished Service Award with Special Commendation

- Must have received the Distinguished Service Award at least six years prior to receiving the Distinguished Service Award with Special Commendation. Any exception based on extraordinary circumstances must be approved by the NCEES board of directors with recommendation by the Committee on Awards.
- Must demonstrate service prior to and after receiving Distinguished Service Award
- Must be a current member, a former member, or an emeritus member
- Must promote engineering or surveying licensure at the national level
- Must demonstrate positive contributions to the advancement of the engineering or surveying profession and the mission and vision of NCEES
- May include participation in professional or technical societies as a consideration
- Must demonstrate active participation in member board activities
- Must include leadership or exemplary service on at least one NCEES committee
- May be nominated by a member board

Meritorious Service Award

- Must be a current or former associate member
- Must demonstrate positive contributions to the advancement of the engineering or surveying profession and the mission, vision, and goals of his or her board and NCEES
- Must participate in member board activities
- Must participate in the promotion of licensure or the enforcement of member board laws and rules
- Must include distinguished service on at least one NCEES committee
- May be nominated by a member board

Distinguished Examination Service Award

- Must demonstrate positive contributions and longtime commitment to the NCEES examination program
 - Must have served on at least one of the Council's examination committees or exam-related task forces
 - Must demonstrate exemplary service and leadership in the advancement and improvement of NCEES examinations and the exam-development process
- May be nominated by a member board, an exam committee, or the board of directors

President's Award

- May be given by the president to recognize an individual for outstanding service in support of NCEES

TEXT

Charge 1

Canvass member boards by October 1, 2019, for nominations for awards to be presented at the 2020 annual meeting. Nominations should be received no later than January 31, 2020.

In accordance with Charge 1, nominations for awards were solicited by October 1, 2019, and were received by January 31, 2020. Nominations were as follows:

- 3 Nominees—Distinguished Service Award
- 0 Nominees—Distinguished Service Award with Special Commendation
- 1 Nominee—Meritorious Service Award
- 7 Nominees—Distinguished Examination Service Award

Charge 2

Provide recommendations to the NCEES board of directors for awards to be presented at the 2020 annual meeting.

The committee made individual ratings of the nominees, and these were forwarded to the chair for tabulation. The combined ratings were returned to the members for review. The committee held a conference call and reached agreement on the recipients. Recommendations to the board of directors were as follows:

- 1 Nominee—Distinguished Service Award
- 0 Nominees—Distinguished Service Award with Special Commendation
- 1 Nominee—Meritorious Service Award
- 5 Nominees—Distinguished Examination Service Award

Respectfully submitted, the **Committee on Awards**:

Robert Krebs, P.E., L.S., Chair

Members

Richard Cottingham, P.E., P.L.S.
Karol Grove, P.S.
Brian Hanson, P.E.

Board liaison

James Purcell, P.E.

Staff liaison

Sherrie Dyer, CAP-OM



Committee on Education

Wendy Amann, P.E., Chair

ABSTRACT

The 2019–20 Committee on Education met to discuss its charges at the 2019 NCEES annual meeting in Washington, D.C. It then met in Dallas, Texas, on February 7–8, 2020, to address the charges.

The committee was assigned five charges. The charges relate to future education standard requirements for licensure, the NCEES Engineering Education Award and NCEES Surveying Education Award, coordination with the Committee on Member Board Administrators (MBAs) regarding Washington Accord signatories, programs accredited by the Engineering Technology Accreditation Commission of ABET (ETAC/ABET), and potential exam fee reductions for needs-based students.

The committee developed four motions. The motions begin on page 57.

CHARGES

Charge 1

Evaluate the NCEES Engineering Education Award and the NCEES Surveying Education Award by reviewing the 2019 award cycles and previous award recipients' successes and recognitions as described in the 2018–19 Education Committee conference report. Recommend revisions as appropriate.

The Education Committee discussed its experience with each award program and the juries, as well as the present guidelines through the 2019–20 cycle.

Engineering Education Award

The original intent of the award was to connect professional practice and education, thus encouraging more students to take the Fundamentals of Engineering (FE) exam. The committee asked what defines the award today. It feels that, at some point, NCEES will need to determine quantitative proof of the impact of giving the awards.

During its discussions, the committee determined that additional criteria developed by last year's Education Committee have not yet been incorporated into the award. This year's committee would like to refine the criteria and incorporate them into the application for the 2020–21 award cycle. NCEES staff will be tasked with making these modifications for the 2020–21 cycle, including the following:

- Add the following to the first bullet, under Knowledge or Skills Gained: "What engineering and nontechnical knowledge/skills did the students gain?"

Each year, NCEES sends a survey to all programs that entered the competition that year, asking questions about what motivated a program to submit an entry, if the project submitted was already part of an existing program, how P.E.s were involved in the project, etc. The committee recommends that future Education Committees review the results of these surveys as part of this standing charge.

As part of its work on this charge, the committee had already decided that it would like to send a survey to all programs that have submitted award entries over the past five years to help determine the quantitative impact the award has on their engineering programs, help the committee refine the criteria, and provide feedback on whether the award had a positive impact on the programs. The committee recommends sending this survey in the fall of 2020 in place of the survey it normally sends each year.

The introduction to this survey should explain why NCEES is asking these questions. Some of the questions to be included are to ask the impact the award had on their program and students, why their program submitted an entry, and whether the award process raised awareness of professional licensure among the program's students.

The committee also discussed the fact that this award does not include ETAC/ABET-accredited programs. A number of committee members feel that these ETAC/ABET programs would have more hands-on projects than engineering programs accredited by the Engineering Accreditation Commission of ABET (EAC/ABET). However, because degrees from ETAC/ABET programs are not currently accepted as a *Model Law* licensure pathway, the committee feels that it should consider adding such programs only if and when that effort progresses. The committee discussed adding a separate award for such programs. This might be a recommendation for a future Education Committee to be charged with considering.

Because of the COVID-19 pandemic, the 2020 Engineering Education Award was canceled.

Surveying Education Award

The committee recommends that the Surveying Education Award be continued. Committee member Steven Hyde, P.S., P.S.M., provided good feedback from the University of Maine, a past winner of the award. He indicated that due to the award, the university's program has further developed and increased not only in undergraduate and graduate enrollments but also in the number of faculty members. Hyde noted that winning the award is a way to tell the university's administration that the program is elite, which ultimately leads to greater support for the program.

The committee recommends that it be charged with tracking information that can be used to reevaluate the criteria for the award. The committee also recommends that additional surveyor members be added to the Education Committee next year as consultants to help in this effort. Like with the Engineering Education Award, all programs that apply for the award receive a survey at the end of the award cycle in August; the committee recommends that this practice be continued.

The committee discussed the timing of each award and how it has changed over the years. It seems to work well now, though there has been feedback from some schools that the timing for them is difficult. The tracking and data gathering needed to modify the awards will need to be done earlier in the fall so that future committees have it ready to work with when they meet.

The Education Committee recommends that NCEES send a feedback survey to all programs that have submitted entries to the award since its inception.

Because of the COVID-19 pandemic, the 2020 Surveying Education Award was canceled.

Charge 2

Work with the Committee on Member Board Administrators to evaluate how NCEES addresses programs from Washington Accord signatories. Recommend revisions as appropriate.

The committee started some dialogue on how member boards can endorse Washington Accord signatories for licensure in the United States. Garth Thomas, P.E., and Lesley Rosier-Tabor, P.E., requested information from the NCEES Credentials Evaluations service regarding foreign degree applicants. The results were interesting in that some programs met the *NCEES Engineering Education Standard* while many other programs did not meet the standard. The gaps in the data show a number of unknown areas.

In addition to the gaps, the information received showed that the term "substantially equivalent" is not equivalent when referring to actual degrees even if accreditation processes are equivalent to the processes used by ABET.

The issue has two sides:

- Determining whether a program truly falls under the Washington Accord
- Determining whether a board will accept it to satisfy the education portion for engineering licensure if a program is deemed to fall under the Washington Accord

To the first point, determining whether a degree is from a program that falls under the Washington Accord is not a simple task. Twenty countries are signatories to the Washington Accord. To find if a program truly falls under the accord, one must go to each country's website through the International Engineering Alliance website and search for the information. Finding the relevant information is problematic. If a member board or NCEES cannot determine if a program falls under the Washington Accord and therefore does not accept it for licensure

purposes, it might put pressure on the other signatories to get their information more organized and more readily available.

This leads to the second point: If that information *can* be found, are member boards willing to accept that a degree from a Washington Accord signatory satisfies the education needed to be licensed as a professional engineer? While accreditation processes may be similar across accord signatories, degrees may not be equal. That, however, is also an issue within each signatory. Not all engineering degrees are the same.

It was the general consensus of the committee that accepting degrees from a Washington Accord signatory would be "checking a box." Therefore, the Education Committee is unwilling to recommend accepting Washington Accord signatory accreditations as equivalent to ABET-accredited programs, given the data that is currently available—especially when a process is already in place, through NCEES Credentials Evaluations, that compares non-ABET degrees to the *NCEES Engineering Education Standard*.

The committee had significant discussion regarding correspondence from 2018–19 President James Purcell, P.E., to ABET in July 2019. Purcell wrote to ABET regarding confusion over the years regarding the mutual recognition agreements (MRAs) to which ABET is signatory. In the letter, he asks ABET for a letter reaffirming its position that signatories of MRAs agree that the graduates of programs accredited by the accord's signatories are prepared to begin practice of the profession at the entry level. ABET responded in August 2019, stating, "[W]e are confident all current accord signatory members have accreditation systems that are substantially equivalent to our own, and that the programs they accredit produce graduates that are prepared for entry into the professional workplace." After consideration of these communications, the Education Committee did not change its thoughts on how to proceed.

The committee did have concerns about a letter sent from NCEES leadership to MBAs in 2005 regarding this issue and feels that the advice in it is outdated and does not reflect many changes that have been implemented within the Washington Accord in the last 15 years. The Education Committee therefore recommends that the NCEES leadership consider sending a new letter to the MBAs to help them understand changes that have occurred since the 2005 letter.

Some committee members were unsure why there is the push to accept signatory applicants. As previously stated, many of the foreign degree applicants for licensure must go through a degree evaluation and must have it done by NCEES; there is no lag time in getting these evaluations completed. The importance of recognizing Washington Accord signatories comes down to threats to licensure and whether NCEES and member boards are putting a barrier in place for applicants with degrees from other countries. As the process currently stands, the Education Committee does not feel that there is a barrier. NCEES has reviewed 4,500 foreign degree records over the last three years. This indicates that such applicants can get licensed. Because a well-defined pathway exists right now, the committee recommends making no revisions to the current process.

The committee did discuss writing an article for *Licensure Exchange* that explains its discussion and recommendation, highlighting quotes from the ABET letter that might assist member boards in evaluating their processes. It also recommends for a future Education Committee to receive a more specific charge on this issue.

Charge 3

Develop guidelines to assist member boards in identifying needs-based students and determining their eligibility for waived or reduced exam fees.

The committee had a good discussion on this charge and determined that member boards should not be involved in setting fees or financial management of individual FE or Fundamentals of Surveying (FS) examinees. It is nearly impossible to determine which applicants are needs-based without collecting private information, the storing of which can be challenging. Because no form or letter exists to indicate whether a student qualifies for need-based aid, member boards cannot offer an associated fee reduction. The committee discussed providing a reduced fee for first-time examinees or college students who take the exam while still in school. It was the general consensus that such a consideration would be better addressed by the NCEES Committee on Finances.

The committee does not see any significant issues at this time so is unsure of what problem it would be trying to fix. The group also discussed whether there should be reductions for military applicants but, again, determined that there is no need. Therefore, the committee recommends no changes.

Charge 4

Review Model Rules 240.30 as described below. Recommend revisions as appropriate.

- Review C7 to define what activity related to a patent is acceptable (should it be attaining a patent related to engineering or surveying?) and to make it an action like others in the list.
The Education Committee recommends revising C7 to say “Obtaining a patent.” It developed Motion 1 as a result. A rationale is included with the motion.
- Consider whether to add a new C9 for “Other qualifying activities approved by the board.”
The committee determined that this language is not needed.
- Review D1 and D2 to determine the appropriate number of professional development hours for semesters and quarters.
The committee had quite a bit of discussion on this topic. Some members agreed that the language should change, while others thought that the language is good as it is. The committee determined that a clarification in its report would be useful, as well as noting that these numbers are consistent with the U.S. Department of Education definition. It recommends no changes to the number of professional development hours associated with semester or quarter hours in the *Model Rules*. It recommends adding an explanation in E1 that the semester hour definition is based on a Carnegie credit hour. The *Continuing Professional Competency Guidelines* states, “One semester hour generally consists of 15 class meetings of 50 or 55 minutes duration. It is assumed that generally twice as much study time is required as class contact time, thus equating to 45 PDHs. Similarly, a quarter-hour qualifying course meets 10 times, and therefore 30 PDHs are allowed. Auditing courses does not require testing, so only the actual class contact hours are allowed.” The committee developed Motion 2 to add the explanation about the Carnegie credit hour. A rationale is included with the motion.

Charge 5

Review position statements and other policies and documents, including the NCEES website, to determine if references to degrees from programs accredited by ETAC/ABET need clarification. Recommend revisions as appropriate.

The committee had extensive discussion on this charge. Much of the discussion was reviewing the notes from last year's committee conversations, actions from the annual meeting, and how the committee should proceed. It discovered that ETAC/ABET-accredited programs are not often mentioned in NCEES policies, position statements, or other documents. The committee determined that an update to Position Statement (PS) 7 is necessary because it is outdated compared to current practice and is not consistent with PS 8 and PS 9, which address engineering- and surveying-related bachelors of science degrees.

The committee feels that an update to PS 7 could lead to a recommendation that the Education Committee be charged with potentially updating the *NCEES Engineering Education Standard* next year. A change in the definition of an ETAC/ABET degree (updating PS 7, which is not aligned with current ABET practices) would be the first step for the Council to consider and would pave the way for potentially updating the standard next year.

The committee noted that there will need to be a related charge for the committee next year if the recommended PS 7 revision passes. This revision creates the possibility of a pathway, and the next step is to refine the rules and standards. The committee acknowledged the feedback received during last year's annual meeting, which indicated this change was moving too fast. This recommendation slows the process by creating a more methodical approach.

Some discussion focused on what would happen if the motion to revise PS 7 fails. The committee feels that if it does, the existing PS 7 would still be in place and the charge could then go to another committee (possibly a future Education Committee) to update it at a later time.

The committee developed Motions 3 and 4 as a result of this charge. A rationale is included with each motion.

Other committee discussion

CPC guidelines

The committee began the meeting with a review of the 2019 annual meeting. NCEES Chief Operating Officer Davy McDowell, P.E., noted that the Committee on Uniform Procedures and Legislative Guidelines (UPLG) had comments regarding Education Committee Motion 3 from last year, which passed. There was concern about a potential conflict between the proposed language and the *CPC Guidelines* regarding independent study. UPLG suggested that “self-study” be defined. Does a live webinar count as self-study? Does a course need to have a quiz? Some states require this, and some do not. After further discussion, the Education Committee recommended that the language in 240.30 C2 be revised to remove “self-study, independent study, and group study,” which should remove any potential conflict. UPLG also noted that *Model Rules* 240.30 E5 should be revised to limit 8 hours of self-study or to limit other courses/activities. After further discussion, the Education Committee decided that E5 is good as written and that no changes are needed. The committee sent comments back to UPLG for its consideration.

The committee also discussed the length of education programs. Per the guidelines, 1 PDH is earned for a minimum of 50 minutes. The American Institute of Architects (AIA) has started offering shorter programs, 30 minutes each, and after completing all three 30-minute sessions, a licensee would earn 1.5 PDHs. Is there a requirement that the program needs to be an hour? Or a continuous hour? The guidelines do state that no activity less than 30 minutes is to be considered. The committee discussed this and thought it made sense to ask the architectural groups their thoughts.

Steven Barrett, Ph.D., P.E., noted that the U.S. Department of Education has a new requirement for universities to prove that their programs meet state licensure requirements. This is seen as a way to promote a pathway to licensure and remove barriers at the education level. For example, many students are unaware that their program might not be ABET-accredited and therefore would not qualify for licensure, depending on that state's regulations. George Murgel, Ph.D., P.E., mentioned that Idaho has already addressed this with one of its universities.

Survey of university programs

The committee thinks a separate survey should be sent to give NCEES broader information from universities regarding their current programs. Questions would include the following:

- Do you require your engineering students to take the FE exam before graduation?
- Do you offer FE exam review courses?
- Do you track whether your graduates (or current students) have passed the exam? If so, can you provide that data to NCEES?

Because NCEES does something like this already, the committee recommends that the results of the FE and FS survey be provided to the Education Committee each year for review.

Respectfully submitted, the **Committee on Education:**

Wendy Amann, P.E., Chair

Members

Gilbert Barish, P.S.
David Beasley, Ph.D., P.E.
Nancy Gavlin, P.E., S.E.
Steven Hyde, P.S., P.S.M.
Michael Kelly, P.E.
George Murgel, Ph.D., P.E.
Sean St. Clair, Ph.D., P.E.
Garth Thomas Jr., P.E.

Consultants

Steven Barrett, Ph.D., P.E.
Michelle Roddenberry, Ph.D., P.E.
Lesley Rosier-Tabor, P.E.

Board liaison

Marlon Vogt, P.E.

Staff liaison

Davy McDowell, P.E.

MOTIONS

Education Motion 1

Move that the UPLG Committee be charged with incorporating the following language into *Model Rules* 240.30 C.

240.30 Continuing Professional Competency

C. Qualifying Activities

PDHs may be earned as follows:

1. Successful completion of college courses
2. Successful completion of short courses, tutorials, webinars, and distance-education courses offered for self-study, independent study, or group study and through synchronous or asynchronous delivery methods such as live, correspondence, archival, or the Internet
3. Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, conferences, or educational institutions
4. Teaching or instructing in 1 through 3 above
5. Authoring published papers, articles, books, or accepted licensing examination items
6. Active participation in professional or technical societies or in accrediting organizations
7. Patents Obtaining a patent
8. Active participation in educational outreach activities pertaining to professional licensure or the surveying/engineering professions that involve K–12 or higher education students

Rationale

The work required to obtain a patent is usually typically part of a team. Usually, the work is engineering or surveying related. The committee feels that the efforts to obtain a patent are qualifying activities for PDHs. The current language simply states, “patent,” and this motion corrects the language to be an action similar to the other items in section C.

Education Motion 2

Move that the UPLG Committee be charged with incorporating the following language into *Model Rules* 240.30 E:

240.30 Continuing Professional Competency

E. Determination of Credit

The board has final authority with respect to approval of courses, credit, PDH value for courses, and other methods of earning credit.

1. Credit for college or community college approved courses will be based upon course credit established by the college. The Carnegie definition of a contact hour is based upon a minimum of 15 class meetings. Thus, a unit of credit equates to 3 hours of student work per class (1-hour lecture plus 2 hours of homework or 3 hours of lab) for 15 classes.
2. Credit for qualifying seminars and workshops will be based on 1 PDH for each hour of attendance. Attendance at qualifying programs presented at professional and/or technical society meetings will earn PDHs for the actual time of each program.
3. Credit determination for activities in subsections D.6 and D.8 is the responsibility of the licensee (subject to review as required by the board).
4. Credit for activity in subsection D.7, active participation in professional and technical societies (limited to 2 PDHs per organization), requires that a licensee serve as an officer and/or actively participate in a committee of the organization. PDHs are not earned until the end of each year of service is completed.

Rationale

Member boards treat professional development hours earned through college courses differently. Some follow the *Model Rules*; others define the number of hours based on contact hours. The committee feels that the current *Model Rules* addresses PDHs accurately and is providing the amendment above to help clarify why one semester hour is equal to 45 professional development hours.

Education Motion 3

Move that Position Statement 7 be revised as follows:

PS 7 Evaluation of Applicants with Degrees in Technology

NCEES recommends that all member boards of licensure, whose statutes do not otherwise prohibit, be encouraged to observe and adhere to the following criteria for the examination of educational qualifications of applicants for licensure, or license, as professional engineers and surveyors:

- A. Graduates of Engineering Technology Accreditation Commission of ABET (ETAC/ABET)-accredited, four-year baccalaureate programs in engineering technology may be granted a maximum of two years of educational credit toward professional engineering licensure and four years of educational credit toward professional surveying licensure if the board determines that the degree contains prescribed surveying courses.
- B. Applicants who entered ETAC/ABET-accredited, four-year baccalaureate programs in engineering technology but did not complete requirements for the four-year baccalaureate degree may be given consideration for educational credit on a prorated basis of one-half year for each year satisfactorily completed, up to a maximum of two years' credit.
- C. Graduates of non-ETAC/ABET-accredited, four-year baccalaureate programs in engineering technology may be granted a maximum of one year of educational credit.

PS 7 Bachelor of Science Degree in Engineering Technology

NCEES recommends that the boards of licensure require any applicant who has a degree in engineering technology, who applies for engineering licensure in any jurisdiction of the United States, and who has not previously been licensed to practice by one of the boards of licensure be required first to demonstrate that he or she possesses at least a four-year bachelor of science degree in engineering technology, acquired through the successful completion of an ETAC/ABET-accredited program or through a board-approved program.

Recognizing that newly ETAC/ABET-accredited programs must spend several years in development before attaining accredited status, NCEES recommends that all applicants be considered as having graduated from an ETAC/ABET-accredited program if their program is/was accredited within three years after their graduation.

Rationale

In reviewing PS 8 and PS 9, the committee decided that the language in PS 7 is not consistent with them and does not appropriately define the bachelor of science degree in engineering technology. Also, the committee believes this change will align the policy statement with current ABET language.

Education Motion 4

Move that Position Statement 13 be revised as follows:

PS 13 NCEES-Recommended Education/Experience Guidelines for P.E. Licensing

4-Year or More Degree	Years of Experience Required	Comments
EAC/ABET accredited	4	NCEES PS 8
Canada (CEAB) accredited	4	
Non-EAC/ABET or non-CEAB accredited	4 or more	Education should be evaluated using the <i>NCEES Engineering Education Standard</i> .
Recommendations below are only for member boards that must evaluate applicants who do not meet the minimum education of an EAC/ABET or equivalent degree as specified in PS 8.		
ETAC/ABET accredited	6	Needed by some boards NCEES PS 7
Related science*	8	Needed by some boards Education should be evaluated using the NCEES Engineering Education Standard.
No degree	20	Needed by some boards

*A related science curriculum from a school or college approved by the board is defined as a four-year curriculum leading to a bachelor of science degree in chemistry, physics, mathematics, or similar science curriculum.

Rationale

Due to the change in PS 7, the table in PS 13 should be updated to align with PS 7 as well as PS 8. This cleans up the table and gives clear direction to the member boards.



Committee on Examination Audit

Christy VanBuskirk, P.E., Chair

ABSTRACT

The committee conducted the exam audit January 27–28, 2020, in Clemson, South Carolina. After the exam committees reviewed and responded to the findings, the Exam Audit Committee held a teleconference with the exam development committee chairs on March 10, 2020, to review the findings and then submitted the final findings to the NCEES board of directors in a confidential report. An independent psychometrician, neither associated with nor involved in the NCEES exam process, assisted with the exam audit. Members of the committee observed and audited, or are scheduled to observe and audit, all standard-setting studies held during the year. The committee has no motions for Council action.

CHARGES

Charge 1

Review all aspects of the NCEES exam development process for the exams being audited to ensure that recognized and accepted psychometric standards for licensing purposes continue to be used and met.

During the audit process, the committee and the independent psychometrician provided the director of Exam Services and the staff liaison to the Exam Audit Committee with comments and opinions for potential enhancements to the exam development process.

Charge 2

Review exam audit findings from the 2018–19 audit cycle to ensure that items were appropriately addressed for the following examinations:

- Principles and Practice of Engineering (PE) Architectural Engineering (April 2018 examination, professional activities and knowledge study [PAKS], and standard-setting study)
- PE Electrical and Computer—three exams (April 2018 examinations, PAKS, and standard-setting study)
- PE Environmental (April 2018 examination, PAKS, and standard-setting study)
- PE Fire Protection (October 2018 examination, PAKS, and standard-setting study)
- PE Structural—two components (April 2018 examination, PAKS, and standard-setting study)
- Principles and Practice of Surveying (item pool administered beginning October 2016)

The committee reviewed last year's audit findings and found that they were satisfactorily resolved. The committee recommends that this charge continue to be a recurring one so that the resolution of each year's Exam Audit Committee findings are reviewed in the following audit year.

Charge 3

Review the resolution of exam audit findings for the following examinations, which have not been previously reviewed by the Exam Audit Committee:

- Fundamentals of Surveying (FS) (item pool administered beginning January 2014, PAKS, and standard-setting study)
- PE Control Systems (October 2014 pencil-and-paper examination)
- PE Industrial (April 2013 pencil-and-paper exam, PAKS, and standard-setting study)
- PE Petroleum (October 2014 pencil-and-paper exam, PAKS, and standard-setting study)

All but three findings from the aforementioned examinations either required no follow-up action or appropriate follow-up action had been completed prior to the 2019–20 Exam Audit Committee meeting. The committee recommends that the resolution of the three findings be reviewed by next year's Exam Audit Committee.

Charge 4

Audit the most recent administration of the following examinations for which sufficient performance data and analyses have been completed:

- FS (computer-based exam item pool administered beginning July 2018)
- PE Chemical (computer-based exam item pool administered beginning January 2018)
- PE Control Systems (pencil-and-paper exam administered October 2019, PAKS, and standard-setting study)
- PE Industrial and Systems (pencil-and-paper exam administered April 2019)
- PE Metallurgical and Materials (pencil-and-paper exam administered October 2019)
- PE Nuclear (computer-based exam administered October 2019)
- PE Petroleum (computer-based exam administered October 2019)

The committee conducted audits for the exams as listed above. The following participated in the March teleconference:

- Committee on Examination Audit chair, board of directors' liaison, and staff liaison
- Committee on Examinations for Professional Engineers member
- Committee on Examinations for Professional Surveyors chair
- Psychometric consultant to the Committee on Examination Audit
- Psychometric consultant for computer-based examinations
- Director of Examination Services
- Exam committee members
- NCEES exam development engineers

During the call, exam committee members presented responses to all findings.

As a result of the audit process, the committee recommended edits to the *Exam Development Procedures Manual* and forwarded them to the Director of Examination Services Timothy Miller, P.E., for consideration by NCEES standing committees and staff, as appropriate.

Charge 5

Observe the following exam standard-setting studies in accordance with Exam Development Procedures Manual 1.5.7:

- PE Control Systems (pencil-and-paper exam administered October 2019)
- PE Industrial and Systems (computer-based exam to be administered October 2020)
- PE Nuclear (computer-based exam to be administered October 2021)

The Exam Audit Committee observed or is scheduled to observe all the above-mentioned standard settings. Due to the timing, the results of two of the three audits cannot be included in this year's report but will be delivered to next year's Exam Audit Committee (as has been done before in similar situations).

Charge 6

Receive and audit the following standard-setting observation reports conducted by the 2018–19 Exam Audit Committee:

- PE Chemical (computer-based exam item pools administered beginning January 2020)
- PE Electrical and Computer—Computer Engineering (April 2019 pencil-and-paper administration)—unscheduled cut score workshop as a result of low examinee volume
- FS (computer-based exam item pool administered beginning July 2020)
- Fundamentals of Engineering—seven modules (CBT item pools administered beginning July 2020)

The reports were reviewed by the Exam Audit Committee. No action or follow up was required.

Charge 7

Review the content and effectiveness of the exam administration manuals to ensure compliance with exam administration policies.

The committee reviewed the exam administration manuals and discussed possible changes with NCEES staff. Recommendations have been sent to Director of Exam Services Miller.

Respectfully submitted, the **Committee on Examination Audit**:

Christy VanBuskirk, P.E., Chair

Members

Alejandro Angel, Ph.D., P.E.
Mandy Holway, P.E.
Dennis Micko, P.E.
Gary Thompson, P.L.S.

Board liaison

Christopher Duhamel, P.E., P.L.S.

Staff liaison

Lehmon Dekle, P.E.

Consultants

Scott Bishop, P.S., EPS Committee Chair
Kent Anderson, P.E., EPE Committee Member



Committee on Examination Policy and Procedures

Jeffrey B. Jones, P.L.S., Chair

ABSTRACT

The Committee on Examination Policy and Procedures (EPP) is responsible for reviewing the effectiveness of the exams and recommending policies, specifications, and procedures consistent with the trends in the engineering and surveying professions. The committee met in San Antonio, Texas, on January 24 and 25, 2020.

The committee was assigned three charges and developed 19 motions, which begin on page 66.

CHARGES

Charge 1

Review all exam policies; specifically, review all Examination Development Policies (EDPs). Recommend revisions as appropriate.

EPP reviewed all exam policies and performed an in-depth review of all EDPs and Examination Administration Policies (EAPs). It developed Motions 1–19 as a result of its discussions.

The committee also recommends that the president-elect charge the Education Committee with moving paragraph C of EAP 5 to the appropriate position statement, as it is not appropriate to be in an exam policy. EAP 5 is shown below for reference.

EAP 5 NCEES Examinations Offered by a Member Board Within Its Jurisdiction

- A. A member board may offer NCEES examinations only in its jurisdiction. The member board must make suitable arrangements to protect the confidentiality and security of the examinations according to NCEES guidelines. Administration of examinations must conform to the NCEES scheduled timeframes for examinations. Individual applicants should apply to the sponsoring jurisdiction in accordance with that jurisdiction's operating policies and procedures. This policy does not preclude an examinee from sitting for a CBT examination in a different jurisdiction.
- B. NCEES may provide directly to a university or college FE or FS examination data that will help measure learning outcomes of the total engineering or surveying education.
- C. Member boards are encouraged to sponsor or otherwise facilitate use of the FE and FS examination results for internal use of institutional outcomes assessment, but such use should not subordinate or endanger the function, concept, or security of the FE or FS examination's primary purpose as the first examination for professional licensure, in keeping with the underlying mission of safeguarding the health, safety, and welfare of the public.
- D. This policy does not preclude a member board from offering the examinations at an NCEES-approved site to U.S. military personnel stationed at military bases outside the United States.

Charge 2

Review exam volumes with regard to EDP 8, Deleting/Combining/Renaming a Discipline or Module from the Examination Program. Provide recommendations to the NCEES board of directors.

As required by EDP 8, the EPP Committee reviewed the first-time examinee volumes to ensure that they meet the requirements. The committee is making the following recommendations to the NCEES board of directors. For the pencil-and-paper exams, the requirement is a total of 50 first-time examinees from NCEES jurisdictions in two consecutive administrations. All pencil-and-paper exams meet these requirements, with the following exceptions:

- The PE Agricultural and Biological Engineering examination experienced a total of 40 first-time examinees for the April 2018 and April 2019 administrations. The April 2019 administration had only 18 total takers, which necessitated offering a previously administered exam since there were not enough takers to perform the equating statistical process. This exam has been on probation previously. The first-time takers per exam administration has averaged 23.7 since 2001. NCEES is to assume financial responsibility of the exam from the American Society of Agricultural and Biological Engineers (ASABE) on October 1, 2020. The exam will convert to computer-based testing (CBT) in October 2021, which could have a positive or negative effect on the number of examinees.

The EPP Committee recommends that the PE Agricultural and Biological Engineering examination be placed on probation under the following conditions:

- Proceed with transition of the exam to CBT in October 2021.
- Have NCEES and ASABE prepare and submit, by December 31, 2020, a specific remedial action plan for increasing the number of first-time takers to a level that meets or exceeds the minimum candidate requirements to be evaluated after three CBT offerings (October 2021, 2022, and 2023).
- Have NCEES and ASABE submit a yearly update. The EPP Committee will review the updates and then evaluate the probation status of the examination.
- The PE Electrical and Computer—Computer Engineering examination had a total of 46 first-time examinees for the April 2019 and October 2019 administrations. The April 2019 administration had only 16 total takers, which necessitated convening an unplanned standard-setting panel to determine the passing score since there were not enough takers to perform the equating statistical process. The exam has averaged 24 first-time takers per exam administration from 2014 through 2019, inclusive. The exam will convert to CBT in October 2021 and will move from being offered twice per year to once per year; doing so may have a positive effect on the exam volumes.

The EPP Committee recommends that the exam be placed on probation under the following conditions:

- Proceed with transition of the exam to CBT in October 2021.
- Have NCEES request assistance from the IEEE–USA Licensure and Registration Committee. Prepare and submit, by December 31, 2020, a specific remedial action plan for increasing the number of first-time takers to a level that meets or exceeds the minimum candidate requirements to be evaluated after three CBT offerings (October 2021, 2022, and 2023).
- Have the NCEES Director of Exam Services submit a yearly update for EPP to review and evaluated probation status.

For the computer-based exams, the requirement is that the first-time examinee volumes be “adequate to provide for accurate psychometric analysis.” Pearson VUE has reported that the exam volumes for 2019 are adequate to provide valid, reliable results with the following exception:

- The PE Nuclear examination had nine first-time examinees for the October 2019 CBT administration. Pearson VUE's report stated, “The PE-NUC exam volume at its October 2019 administration was particularly low: there were only 9 first-time candidates who tested in Member Board jurisdictions. This figure was too low to permit us to update the statistics of any operational item or, especially, to promote any pretested item to active (operational) status. The 2019 administration of this exam was the second time this exam was administered in CBT format, and it was the second time its candidate volume fell below 25. It may be appropriate to evaluate whether this trend in candidate volumes is expected to continue, or whether other steps can be taken to increase volumes.” This exam has been on probation previously and the first-time takers per exam administration has averaged 23.6 since 2001. NCEES assumed financial responsibility of the exam from the American Nuclear Society (ANS) on October 1, 2018.

The EPP Committee recommends that the PE Nuclear examinations be placed on probation under the following conditions:

- Continue to produce the exam in CBT format.
- Have NCEES request assistance from ANS. Prepare and submit, by December 31, 2020, a specific remedial action plan for increasing the number of first-time takers to a level that meets or exceeds the minimum candidate requirements to be evaluated after the CBT administration in 2023 (after four additional CBT offerings).
- Have the NCEES Director of Exam Services Timothy Miller, P.E., submit a yearly update for EPP to review and evaluate the probation status.

The NCEES board of directors reviewed the EPP Committee's recommendations at its meeting on February 28–29, 2020. The board of directors affirmed EPP's recommendations and directed the NCEES Director of Exam Services to notify the exam development committees and technical societies.

Charge 3

Review the NCEES Examinee Guide for content and effectiveness.

The committee reviewed the November 2019 *NCEES Examinee Guide* and recommends changes for clarity and consistency. The following changes were forwarded to NCEES staff for review and possible inclusion in an upcoming revision to the *NCEES Examinee Guide*.

- Replace “Structural Engineering (SE)” with “16-hour Structural Engineering (SE)” throughout the guide.
- Replace “state/territory” with “jurisdiction” throughout the guide.
- Replace “state board” with “licensure board” throughout the guide.
- Add items 1 and 2 from “Registration Process” on page 21 to “Registration Process” on page 3.
- Replace “special accommodations” with “exam accommodations” throughout the guide.
- Add a link where instructions to email for info/help occur.
- Replace “state-specific exams” with “jurisdiction-specific exams” throughout the guide.
- Remove “state” from “your state licensing board” throughout the guide.
- Remove the first paragraph under “How to Register” on page 21 because it duplicates the first paragraph under “Eligibility” on page 21.
- Remove “state” before the word “application” throughout the guide.
- Have military accommodations on page 23 match those listed on page 6.
- Have the definition of “bound materials” on page 23 match the revised definition in EAP 4.
- Have “Breaks” on page 25 match the language on page 9.
- Have “Exam Irregularities” match those in the *NCEES Candidate Agreement* for pencil-and-paper exams.
- Make other minor grammatical changes as recommended and provided to NCEES staff.

Respectfully submitted, the **Committee on Examination Policy and Procedures**:

Jeffrey Jones, P.L.S., Chair

Members

Steven Bishop, S.E.
Michael Drewyor, P.E., P.S.
Howard Gibbs, P.E.
James (Don) Pedigo II, P.L.S.
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Consultants

Carmine Balascio, Ph.D., P.E.
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Board liaison

Brian Robertson, P.E.

Staff liaison

Timothy Miller, P.E.

MOTIONS

EPP Motion 1

Move that Exam Development Policy 1 be amended as follows:

EDP 1 Examinations

It shall be the policy of NCEES in all publications and correspondence to refer to the respective examinations only as follows:

- A. Fundamentals of Engineering (FE) examination
- B. Principles and Practice of Engineering (PE) examination, ~~including which includes~~ the 16-hour Structural Engineering (SE) examination
- C. Fundamentals of Surveying (FS) examination
- D. Principles and Practice of Surveying (PS) examination

The purpose of the examinations is to assess licensure candidates’ abilities to practice competently as engineers or surveyors and to assist member boards in the regulation of the practice of engineering and surveying as it relates to safeguarding the health, safety, and welfare of the public.

Rationale

This change gives a more complete definition of the Structural Engineering exam.

EPP Motion 2

Move that Exam Development Policy 3 be amended as follows:

EDP 3 Engineering and Surveying Examinations and Formats

- A. ~~The Fundamentals of Engineering examination shall be administered via computer-based testing (CBT) and have supplied references.~~
[Fundamentals of Engineering Examination](#)
~~The Fundamentals of Engineering examination shall be administered via computer-based testing (CBT) and have supplied references.~~

- B. [Principles and Practice of Engineering Examinations](#)

The Principles and Practice of Engineering examinations shall be offered ~~only~~ in the following disciplines and shall be open-book, pencil-and-paper examinations or offered via CBT with supplied references as defined in EAP 4:

1. Agricultural and Biological
2. Architectural
3. Chemical
4. Civil
5. Control Systems
6. Electrical and Computer—Computer Engineering
7. Electrical and Computer—Electronics, Controls, and Communications
8. Electrical and Computer—Power
9. Environmental
10. Fire Protection
11. Industrial and Systems
12. Mechanical—HVAC and Refrigeration
13. Mechanical—Machine Design and Materials
14. Mechanical—Thermal and Fluid Systems
15. Metallurgical and Materials
16. Mining and Mineral Processing
17. Naval Architecture and Marine
18. Nuclear
19. Petroleum
20. 16-hour Structural Engineering

- C. [Surveying Examinations](#)

The surveying examinations shall be available as follows:

1. The Fundamentals of Surveying examination shall be administered via CBT and have supplied references.
2. The Principles and Practice of Surveying examination shall be administered via CBT and have supplied references.
3. Member boards shall reserve the right to administer, score, and report state-specific examinations.

D. [Examination Item Banks](#)

Examination items for all examinations shall be maintained ~~solely either~~ at NCEES headquarters or at an offsite testing service that is able to demonstrate insurance, bond, or reserve to cover the pecuniary liability for the items should the items be compromised, lost, or damaged by the testing service.

1. At the time an exam development committee releases a linear, fixed form (LFF) exam to be published, the exam item bank shall contain sufficient operational items to create three times the number of [exam](#) forms available to examinees in a testing window.
2. At the time an exam development committee releases a pool of items to be published for linear-on-the-fly testing (LOFT), the pool shall contain, at a minimum, the number of operational items required to create three unique, non-overlapping [exam](#) forms. At the time of publishing, the exam item bank shall have sufficient operational items to create two additional pools of similar composition. Pool size will be determined by the psychometric consultant per the criteria listed in the *NCEES Exam Development Procedures Manual*.

E. [Exam Contingency Plans](#)

The chief executive officer shall have contingency plans available in the event of any irregularity that impacts the security of an exam or the ability to administer an exam per NCEES exam policies or prescribed schedules.

F. [Exam Preparation Material Development](#)

Exam preparation material shall be developed for each NCEES examination. This material shall provide sample questions and solutions on each major topic area sufficient to provide candidates with a sense of the structure, scope, and difficulty of the examination. Exam preparation material shall remain current and be available six months prior to the administration of an examination.

Rationale

The committee added headers for consistency, to make it easier to find specific items, to remove extra adjectives, and to clarify the term “forms.”

EPP Motion 3

Move that Exam Development Policy 3B, Exam Development Policy 15B, and Exam Administration Policy 8E be amended as follows:

EDP 3 Engineering and Surveying Examinations and Formats

- B. The Principles and Practice of Engineering examination shall be offered only in the following disciplines and shall be open-book, pencil-and-paper examinations or offered via CBT with supplied references as defined in EAP 4:

20. 16-hour Structural Engineering

~~The 16-hour Structural Engineering examination shall consist of two 8-hour components: the Vertical Forces (gravity/other) and Incidental Lateral component and the Lateral Forces (wind/earthquake) component. The 16-hour Structural Engineering examination shall be considered and referred to as one examination.~~

EDP 15 Reporting of Scores

~~B. 16-Hour Structural Engineering~~

~~The Structural Engineering examination shall be considered and referred to as one 16-hour examination.~~

~~The Structural Engineering examination shall consist of two 8-hour components: the Vertical Forces (gravity/other) and Incidental Lateral component and the Lateral Forces (wind/earthquake) component. A candidate must receive acceptable results on both 8-hour components to pass the Structural Engineering examination. A candidate may sit for each component in separate exam administrations.~~

~~A component results notice will be transmitted to the member board for each administration that a candidate takes a component. After a candidate has received an acceptable result on both components, an examination pass notice will be transmitted to the member board to indicate that the candidate has passed the Structural Engineering examination.~~

EAP 8 Release and Use of Examination Results

- E. The Structural Engineering examination shall be considered and referred to as one 16-hour examination. For the Structural Engineering examination, a candidate may sit for either component in separate exam administrations but must receive acceptable results on both components within a five-year period in order to pass the examination.

~~A component results notice will be transmitted to the member board for each administration in which a candidate takes a component. Receiving an acceptable result on only one 8-hour component shall not be sufficient for any licensure purposes. After a candidate has received an acceptable result on both components, an examination pass notice will be transmitted to the member board to indicate that the candidate has passed the 16-hour Structural Engineering examination.~~

Rationale

The deleted language in EDP 15 B is being moved to more appropriate policies or eliminated to remove redundancy with other policies. Note: Additional changes to EAP 8E are being proposed in Motion 16.

EPP Motion 4

Move that Exam Development Policy 4 be deleted.

EDP 4 Availability

- A. ~~The following examinations shall be available on a regular schedule per EAP 2:~~

- ~~1. Fundamentals of Engineering~~
- ~~2. Principles and Practice of Engineering~~
- ~~3. Fundamentals of Surveying~~
- ~~4. Principles and Practice of Surveying~~

- B. ~~Depth modules for the Principles and Practice of Surveying examination shall be offered on a regular schedule as adopted by the board of directors.~~

- C. ~~CBT examinations shall be made available in testing windows.~~

Rationale

This information is more associated with administering the exams, not developing them; therefore, shouldn't be a development policy. It is also adequately covered in EAP 2.

EPP Motion 5

Move that Exam Development Policy 5 be amended as follows:

EDP 5 Entry of New Discipline or Depth Module or Reinstatement to PE Examination Status

- A. [Accreditation Requirement](#)

No discipline shall be added or reinstated to the examination program unless there is an EAC/ABET-accredited program in the discipline.

- B. [Technical Society Requirement](#)

No discipline shall be added or reinstated unless a technical society agrees to sponsor the examination. All technical societies that sponsor examinations shall sign an agreement with NCEES delineating the responsibilities of both parties in developing the examinations.

- C. [Member Board Requirement](#)

Requests for examinations and/or depth modules shall be made by no fewer than 10 member boards collectively who can each demonstrate a need for the examination or depth module in their jurisdiction. A request older than four years must be reaffirmed by the member board. Requests shall include proof of such need, estimate of usage, and impact on safeguarding the health, safety, and welfare of the public. Proof of need shall include evidence that knowledge areas and skills are not adequately measured in an existing examination or module and that additional knowledge areas and skills required for the discipline are sufficient to support a new examination or module.

- D. [Minimum Number of Exam Candidates](#)

No discipline or depth module shall be added or reinstated to the examination program unless the number of candidates for an ongoing examination conforms to NCEES policies and procedures. If that is demonstrated, a professional activities and knowledge study (PAKS) shall be conducted to establish that the addition in question is composed of a unique set of knowledges important for safeguarding the health, safety, and welfare of the public.

- E. [CBT Format](#)
The request shall include a plan to develop the exam in CBT format.
- F. [Notification to Member Boards](#)
Member boards shall be notified one year in advance of the addition or reinstatement of any discipline or depth module to the PE examination program.

EPP Motion 6

Move that Exam Development Policy 6 be amended as follows:

EDP 6 Adoption of a New Discipline-Specific FE Examination

- A. [Accreditation Requirement](#)
No discipline shall be added to the examination program unless there is an EAC/ABET-accredited program in the discipline.
- B. [Member Board Requirement](#)
Requests for the discipline-specific FE examination must be made by no fewer than 10 member boards collectively who can each demonstrate a need for that discipline in their jurisdiction. Requests shall include proof of such need, estimate of usage, and impact on safeguarding the health, safety, and welfare of the public. Proof of such need shall include evidence that knowledge areas and skills are not adequately measured in an existing FE examination and evidence that those knowledge areas and skills are required for the discipline are sufficient to support a new FE examination.
- C. [Notification to Member Boards](#)
Member boards shall be notified at least one year in advance of the addition of any discipline-specific module to the FE examination program.

Rationale

The committee added headers for consistency and to make it easier to find specific items.

EPP Motion 7

Move that Exam Development Policy 8 be amended as follows:

EDP 8 Deleting/Combining/Renaming a Discipline or Module from the Examination Program

- A. [Deleting/Combining of Pencil-and-Paper Examinations](#)
If in two consecutive administrations of pencil-and-paper examinations, there have been fewer than 50 total first-time examinees from NCEES jurisdictions in a specific examination or module, the Committee on Examination Policy and Procedures (EPP) shall review the desirability of continuing the subject examination or module and make one of the following recommendations to the board of directors:
 1. Continue to prepare the examination or module.
 2. Request the appropriate exam development committee to prepare and submit a specific remedial action plan for increasing the number of first-time takers to a level that meets or exceeds the minimum candidate requirements in the time period specified by the EPP Committee.
 3. ~~Recommend that Place~~ the examination or module ~~be placed~~ on probation. The EPP Committee shall specify the conditions of the probation, including a time frame for corrective action. The recommendation may include the combination of the examination with another examination or other such action as the EPP Committee deems appropriate.
 4. Discontinue the examination or module.
- B. [Deleting/Combining of CBT Examinations](#)
If the population of first-time examinees from NCEES jurisdictions for any NCEES CBT examination or module is not adequate to provide for accurate psychometric analysis, the EPP Committee shall review the desirability of continuing the subject examination or module and make one of the following recommendations to the board of directors:
 1. Continue to prepare the examination or module.
 2. Request the appropriate exam development committee to prepare and submit a specific remedial action plan for increasing the number of first-time takers to a level that meets or exceeds the minimum candidate requirements in the time period specified by the EPP Committee.
 3. ~~Recommend that Place~~ the examination or module ~~be placed~~ on probation. The EPP Committee shall specify the conditions of the probation, including a time frame for corrective action. The recommendation may include the combination of the examination with another examination or other such action as the EPP Committee deems appropriate.
 4. Discontinue the examination or module.

- C. [Request to Delete an Examination or Module](#)
If an NCEES committee, technical society, or other group desires to have an examination or module deleted, it should make a request to the EPE/EPS Committee. The EPE/EPS Committee will review the request and make a recommendation to the board of directors.
- D. [Request to Rename an Examination](#)
Any requests to rename an examination or module or to combine two or more discipline examinations or modules should also be made to the EPE/EPS Committee. Requests shall include proof of such need, estimate of usage, and impact on safeguarding the health, safety, and welfare of the public. Proof of such need shall include evidence that knowledge areas and skills are not measured adequately in an existing examination or module and evidence that those knowledge areas and skills required for the discipline are sufficient to support a new, combined, or renamed examination or module. The EPE/EPS Committee will review the request and make a recommendation to the board of directors.
- E. [Adequate Item Bank Requirement](#)
If an examination-preparing entity fails to have on file with NCEES at all times an adequate item bank as specified in paragraph D of EDP 3, including solutions and knowledges being assessed, the EPP Committee shall review the desirability of continuing the examination or module and make one of the following recommendations to the board of directors:
 1. Continue to prepare the examination or module.
 2. Discontinue the examination or module.
 3. ~~Put Place~~ the examination ~~or module~~ on probation and recommend specific remedial action that may include contracting for item writing with an outside entity or other such action as the EPP Committee deems appropriate. If such remedial action fails to cause the examination to meet the requirements of paragraph D of EDP 3 within one year after the examination was put on probation, the EPP Committee shall recommend appropriate action to the board of directors.
- F. [Sufficient Data for Exam Audit Requirement](#)
If an examination-preparing entity fails to provide the Examination Audit Committee with sufficient data to conduct an adequate audit for two consecutive audit cycles, the EPP Committee shall review the desirability of continuing the examination or module and make one of the following recommendations to the board of directors:
 1. Continue to prepare the examination or module.
 2. Discontinue the examination or module.
 3. ~~Put Place~~ the examination ~~or module~~ on probation and recommend specific remedial action that the EPP Committee deems appropriate. If the examination entity fails to provide sufficient data to successfully complete the next scheduled examination audit, the EPP Committee shall recommend appropriate action to the board of directors.
- G. [Temporary Suspension of an Examination](#)
If, upon the chief executive officer's recommendation and an EPE/EPS Committee evaluation, the board of directors determines that an examination does not meet the policies, specifications, and/or guidelines of the Council, the board of directors may temporarily suspend the offering of an examination in that particular discipline.

Rationale

The committee added headers for consistency and to make it easier to find specific items.

EPP Motion 8

Move that Exam Development Policy 10 be amended as follows:

EDP 10 Adoption of a New Depth Module for the PS Examination

- ~~A. No depth module shall be added to the Principles and Practice of Surveying examination unless and until no fewer than 10 member boards collectively request the module. Requests shall include proof of need, estimates of usage, and impact on safeguarding the health, safety, and welfare of the public.~~
- A. [Member Board Requirement](#)
~~Requests for depth modules shall be made by no fewer than 10 member boards collectively who can each demonstrate a need for the depth module in their jurisdiction. A request older than four years must be reaffirmed by the member board. Requests shall include proof of such need, estimate of usage, and impact on safeguarding the health, safety, and welfare of the public. Proof of need shall include evidence that knowledge areas and skills are not adequately measured in an existing examination or module and that additional knowledge areas and skills required for the discipline are sufficient to support a new module.~~

B. Minimum Number of Exam Candidates

No discipline or depth module shall be added or reinstated to the examination program unless the number of candidates for an ongoing examination conforms to NCEES policies and procedures. If that is demonstrated, a professional activities and knowledge study (PAKS) shall be conducted to establish that the addition in question is composed of a unique set of knowledges important for safeguarding the health, safety, and welfare of the public.

C. Statutory Requirement for a Depth Module

~~B.~~—A depth module must address a distinct PS practice area included within statutory coverage of the 10 requesting jurisdictions.

~~C.D.~~ CBT Format Requirement

The request shall include a plan to develop the exam in CBT format.

~~D.E.~~ Notification to Member Boards

Member boards shall be notified one year in advance of the addition of any depth module to the PS examination.

Rationale

The committee added headers for consistency and to make it easier to find specific items. It also revised language to more closely follow the wording and structure of EDP 5C and EDP 6B.

EPP Motion 9

Move that Exam Development Policy 11 be amended as follows:

EDP 11 Item Writers, Pass-Point Evaluators, Reviewers, and Scorers

A. Qualification Requirement

Each person involved as an item writer, pass-point evaluator, reviewer, or scorer for the NCEES PE or PS examinations must have an active professional license issued by an NCEES member board, must be qualified in the appropriate discipline, and must be familiar with requirements for and capabilities of candidates who are minimally qualified to practice in that discipline. Engineers and surveyors with licenses that have inactive or retired status are ineligible to serve in these positions.

B. Pass-Point Evaluation Team Requirements

Exam committees shall require that at least one person who participates on the pass-point evaluation team be a person who has worked on the current development of an examination undergoing a pass-point evaluation ~~will participate on the pass-point evaluation team~~. The number of current exam development members participating in the pass-point evaluation ~~for Group I exams shall be no more than one-quarter of the pass-point evaluation team and for Group II exams shall be no more than one-third of the pass-point evaluation team~~. Any exam committee member involved in preliminary testing of the examination undergoing the pass-point evaluation shall be excluded from participating on the pass-point evaluation team for that examination.

C. Restriction on Teaching Refresher Courses

Any person serving on an NCEES examination development committee or involved in a pass-point evaluation panel shall not teach a refresher course related to that examination within three years ~~of after~~ serving on the committee or panel.

D. Exam Developers Requirement

Any person involved in the development of an NCEES examination who is later required by a jurisdiction member board to sit for that examination must inform that ~~jurisdiction member board~~ that he or she worked on the development of that examination.

Rationale

The committee added headers for consistency and to make it easier to find specific items; it also edited language for consistency and clarity.

EPP Motion 10

Move that Exam Development Policy 13 be amended as follows:

EDP 13 Security of Examination Material

No items or item banks in current use for NCEES examinations shall be used for any purpose outside of the NCEES examination program.

~~All member boards shall observe approved NCEES requirements.~~

Rationale

The committee feels that the sentence is not needed.

EPP Motion 11

Move that Exam Development Policy 16 be amended as follows:

EDP 16 EPE and EPS Committee Members

Committee Qualifications

Members of the EPE and EPS Committees should, ~~to the extent practicable, be representatives of the engineering and surveying disciplines within the various include current and/or past representatives from their respective exam development committees.~~

Rationale

The committee is proposing these changes to make the language more consistent with other language in the policy manual.

EPP Motion 12

Move that Exam Development Policy 17 be amended as follows:

EDP 17 Examination Audits

The Examination Audit Committee shall audit all examinations developed by NCEES. The following constraints shall be used:

A. Pencil-and-paper examinations

1. All benchmark exams, which are the first exams administered following a professional activities and knowledge study (PAKS), shall be audited.
2. Each exam shall be audited at least once between benchmark exam audits.
3. There shall be no more than four years between audits.

B. CBT examinations

1. CBT representative examinations (as created by the testing service psychometrician) from the benchmark item pool, which is the first item pool following a PAKS, shall be audited.
2. CBT representative examinations shall be audited at least once between benchmark item pool audits.
3. There shall be no more than four years between audits.

The president-elect shall, in developing charges for the Examination Audit Committee, develop a list of examinations for audit in consultation with the current chair of the Examination Audit Committee and the NCEES examination services director. Circumstances may prevail that would affect which examinations are selected for audit in a given year.

The Examination Audit Committee shall review each exam audited as to its conformance with specified criteria set forth in the Examination Audit Committee procedures.

Rationale

The committee added language to define terms and to make it more concise.

EPP Motion 13

Move that Exam Administration Policy 1 be amended as follows:

EAP 1 Administration of Examinations

- A. Guidelines and Procedures
NCEES will publish examination administrative procedures that will provide guidelines and procedures ~~for that member boards shall follow~~ in the use of NCEES engineering and surveying examinations. The guidelines and procedures will cover matters concerning security, use, scoring, and general administration of such examinations for the purposes for which they are designated to ensure fair and equitable treatment of ~~jurisdictions-member boards~~ and examination candidates.
- B. Testing Regulations
Member boards or their designated representative will provide to each candidate approved to take NCEES examinations information regarding regulations to be observed during the examinations and actions that may be taken in the event of a testing irregularity.
- C. Candidate Admission
Approval of candidates applying to take NCEES examinations shall be by the individual member boards or their designated representative. To sit for an NCEES examination, candidates will be required to obtain a unique identification number from NCEES. Only candidates with an NCEES-supplied identification number will be allowed admission into the examination site. Candidates not allowed admission to the morning session of a pencil-and-paper examination will not be admitted to the afternoon session.
- D. Restriction of Who Can Be in the Examination Room
For pencil-and-paper examinations, only preauthorized member board members, member board staff, proctors, NCEES-designated representatives, and candidates actually taking an examination will be permitted in the examination room.
- E. Restriction of Retaking an Examination
Candidates who have passed an examination may not retake that same examination unless required by a member board.
- F. Irregularity Restriction
If a candidate's examination results are not released due to a suspected exam irregularity, the candidate will not be allowed to register for another exam until the investigation is complete and the irregularity has been resolved per the *Security and Administrative Procedures Manual*.
- G. Examination Scheduling Restriction
A candidate for a CBT exam may take the examination only one time per testing window and no more than three times in a 12-month period.
- H. Committee on Examination Audit
The Committee on Examination Audit shall include, as part of its auditing responsibilities, a review of the examination administrative procedures manual for content and effectiveness.
- I. Banned Registration Requirements
If a member board bans an examinee from registering for an examination as referenced in EAP 8, it shall be the responsibility of that member board to notify NCEES of the specific terms and reasons for the ban. NCEES will make this information available to all member boards. The decision as to whether another member board agrees to honor the terms of the original member board's decision to ban this examinee's registration will remain with the individual member boards.

Rationale

The committee amended language for clarity and added headings for consistency.

EPP Motion 14

Move that Exam Administration Policy 4 be amended as follows:

EAP 4 Materials Permitted and Not Permitted in Examination Room

- A. Pencil-and-Paper and CBT Examinations
 - 1. Devices or materials that might compromise the security of the examination or examination process are not permitted. These include any devices with copying, recording, or communication capabilities.
 - 2. Only models of calculators as specified or supplied by NCEES are permitted in the examination room.
 - 3. Only NCEES-supplied marking and erasing instruments are permitted for use in the examination room.
 - 4. Other items specifically allowed by the current NCEES *Examinee Guide* are permitted.
- B. Open Book Examinations
 - 1. The following reference materials and aids may be brought into the examination room by the examinee for his or her personal use only:
 - a. Handbooks and textbooks
 - b. Bound reference materials, provided that the material be and remain contained (bound) in a cover during the entire examination, ~~bound referring to:~~ The term "bound" refers to the following:
 - (1) Material bound permanently, i.e., stitched or glued
 - (2) Material fastened securely in its cover by fasteners that penetrate all papers, e.g., ring binders, spiral binders, plastic snap binders, brads, screw posts. Loose material inside binder pockets does not qualify as bound.
 - 2. Examinees are not permitted to exchange any reference materials.
 - 3. Writing tablets, unbound tables, or unbound notes are not permitted in the examination room.
 - 4. Examinees may tab reference books prior to the examination with Post-it™ type notes and flags, but pads of Post-it type notes and flags are not permitted in the examination room.
- C. Closed-Book Examinations
Only NCEES-supplied reference materials are permitted for use in the examination room.

Rationale

The committee amended language for clarity.

EPP Motion 15

Move that Exam Administration Policy 5 be amended as follows:

EAP 5 NCEES Examinations Offered by a Member Board Within Its Jurisdiction

- A. Jurisdiction Limitation
A member board may offer NCEES examinations only in its jurisdiction. The member board must make suitable arrangements to protect the confidentiality and security of the examinations according to NCEES guidelines. Administration of examinations must conform to the NCEES scheduled timeframes for examinations. Individual applicants should apply to the sponsoring ~~jurisdiction-member board~~ in accordance with that jurisdiction's operating policies and procedures. This policy does not preclude an examinee from sitting for a CBT examination in a different jurisdiction.

- ~~C.~~ Member boards are encouraged to sponsor or otherwise facilitate use of the FE and FS examination results for internal use of institutional outcomes assessment, but such use should not subordinate or endanger the function, concept, or security of the FE or FS examination's primary purpose as the first examination for professional licensure, in keeping with the underlying mission of safeguarding the health, safety, and welfare of the public.
- D. U.S. Military Base Exemption
This policy does not preclude a member board from offering the examinations at an NCEES-approved site to U.S. military personnel stationed at military bases outside the United States.

Rationale

The committee amended language to be concise and added headings for consistency. It is proposing to move section C to be part of section A. Section B is not shown above because Motion 16 is proposing to move it to another section; if that Motion 16 passes, then Section D above will be renumbered accordingly.

EPP Motion 16

Move that Exam Administration Policy 8, Exam Administration Policy 5B, and Exam Development Policy 15 C and D be amended as follows:

EAP 8 Release and Use of Examination Results

A. Results Reporting

Examination results shall be released only to the respective member board, to its designee, or directly to examinees as directed by the member board. Examination results for candidates suspected of an exam irregularity shall not be released until the irregularity has been resolved per the *Security and Administrative Procedures Manual*. Reporting of examination results for candidates will be reported only as pass or fail. All failing candidates will be provided with a diagnostic report to indicate performance on those sections attempted.

The converted scores for each candidate will be furnished to member boards upon request. The use of individual candidate scores is for licensure purposes only, that is, to establish minimum competency. Individual candidate names and scores shall not be published, made public, used to make related comparisons, or used for purposes other than licensure. For example, scores above passing shall not be used to rank-order or differentiate among passing candidates.

B. Validity and Integrity

NCEES shall strive to ensure that the validity and integrity of the examinations are preserved and examinees are treated in a fair and equitable manner. NCEES reserves the right to treat exam scores as final and not subject to change after one year has passed from the date of release from NCEES to the member boards. If there is a post-roster change within a year of the date NCEES releases the examination results roster to the member boards, then NCEES will notify the member board only if the post-roster change alters a candidate's status from fail to pass.

NCEES reserves the right to notify the member boards at any time if it learns that a candidate engaged in any improper conduct relating to the exam on which the score was obtained or took any action that jeopardized the security of any other NCEES exam or exam administration.

C. In Case of an Irregularity

Examination results for any examinee suspected of an exam irregularity will be provided in perpetuity to the affected member board in a report segregated from all other examinee score reports. This special report will identify the examinee and provide the examinee score information. After the release of the special score report, NCEES will provide the member board with the results of any analysis conducted or other information pertaining to the suspected irregularity. The member board will conduct a review and notify NCEES of its findings and any action taken. An examination irregularity is one that potentially compromises the exam integrity or provides individual candidates with benefits not afforded to other candidates.

D. Examinee Non-Compliance

Examination results for any examinee who fails to comply with the conditions stated in the NCEES Examinee Guide are subject to invalidation by NCEES in accordance with the list below. Exam irregularities that may be grounds for exam invalidation by the member boards are included in the second list below. The identity of any examinee whose results are invalidated and the reason for invalidation will be provided to the affected member board. Examinees identified by post-exam collusion analysis are subject to EAP 8C above. The following items in the NCEES Examinee Guide are grounds for a candidate to be dismissed from the exam room and for a candidate's exam results to be invalidated by NCEES:

- Having a device with copying, recording, or communication capabilities in his or her possession
- Having a calculator that is not on the NCEES-approved list
- Removing pages from his or her exam booklet on pencil-and-paper examinations
- Leaving the exam area without authorization

The following are the items in the NCEES *Examinee Guide* that are grounds for a candidate's exam results to be invalidated by a member board:

- Having loose papers, legal pads, writing tablets, or unbound notes in his or her possession
 - Using a non-NCEES writing instrument or eraser to complete any portion of the exam
 - Beginning the exam before the proctor instructs him or her to do so
 - Failing to stop writing immediately when time is called on pencil-and-paper examinations
 - Writing on anything other than the exam booklet or answer sheet on pencil-and-paper examinations
 - Violating any other terms stated in these regulations that are cause for dismissal or exam invalidation
- The following item in the NCEES *Examinee Guide* falls under collusion and is already grounds for invalidation by the member boards:
- Copying from another examinee's answer sheet or colluding with other examinees

E. Structural Engineering Examinations

~~The Structural Engineering examination shall be considered and referred to as one 16-hour examination. For the 16-hour Structural Engineering examination, a candidate may sit for either component in separate exam administrations but must receive acceptable results on both components within a five-year period in order to pass the examination. Receiving an acceptable result on only one 8-hour component shall not be sufficient for any licensure purposes.~~

F. Release to Universities and Colleges

~~NCEES may provide directly to a university or college FE or FS examination data that will help measure learning outcomes of the total engineering or surveying education.~~

EDP 15 Reporting of Scores

C. Candidate Score Reports

~~Reporting of examination results for candidates will be reported only as pass or fail. All failing candidates will be provided with a diagnostic report to indicate performance on those sections attempted.~~

D. Release of Candidate Scores to Member Boards

~~The converted scores for each candidate will be furnished to member boards upon request. The use of individual candidate scores is for licensure purposes only, that is, to establish minimum competency. Individual candidate names and scores shall not be published, made public, used to make related comparisons, or used for purposes other than licensure. For example, scores above passing shall not be used to rank-order or differentiate among passing candidates.~~

EAP 5 NCEES Examinations Offered by a Member Board Within Its Jurisdiction

~~NCEES may provide directly to a university or college FE or FS examination data that will help measure learning outcomes of the total engineering or surveying education.~~

Rationale

The committee added language to be concise and to follow the previous definition, added headings for consistency, and moved language from EDP 15C and 15D to EAP 8A, and moved language from EAP 5B to EAP 8F. Note: Additional changes to EDP 8E were proposed in Motion 3.

EPP Motion 17

Move that Exam Administration Policy 10 be amended as follows:

EAP 10 NCEES Examinations Offered to a Foreign Entity

A. Authority of CEO

Upon receiving a request, the chief executive officer may be authorized by the NCEES board of directors to enter into discussions with a foreign entity concerning the administration of NCEES examinations at a foreign site. The discussions will include an assurance that NCEES examinations will be administered in full compliance with all NCEES examination policies and procedures. All costs borne by NCEES to carry out this provision will be reimbursed.

B. Contracting with Foreign Entities

NCEES may contract with the foreign entity to provide administration of its examinations to the foreign entity's engineering or surveying applicants, upon approval of the Council. A draft agreement that defines areas of responsibility for the foreign entity and NCEES may then be created. The agreement will require, at a minimum, that the foreign entity reimburse all costs borne by NCEES to carry out the provisions of the agreement.

As an exception, the NCEES board of directors is authorized to permit the Fundamentals of Engineering and the Fundamentals of Surveying examinations to be administered at NCEES-approved test sites to applicants from a foreign ABET-accredited engineering or surveying program. At a minimum, all costs borne by NCEES to carry out this provision will be reimbursed.

C. Minimum Criteria for Examinees

For any approved agreement, NCEES will establish minimum criteria for examinees of the foreign entity that are in general conformance with the existing NCEES Model Law and Model Rules. NCEES will retain the score information for examinees of foreign entities and will transmit that information to any member board when requested.

D. Use of Examination Results for Licensure

The examinations may be used to assist examinees interested in applying for licensure as a professional engineer or surveyor with an NCEES member board as well as an outcomes assessment tool to assist in measuring the outcomes of a foreign-based education system.

However, in the event that the examinee elects to use the results of the examination for the purpose of applying for licensure, the member board may not be precluded from imposing any additional requirements related to state licensure, including but not limited to educational and experience requirements.

E. Restriction on Use of Examination Results

Examinee performance data from examinations provided to a foreign entity shall not be included in exam evaluation or development, used to establish cut scores, or included in exam result statistics for NCEES jurisdictions. Examinee performance data from exams provided to a foreign entity may be evaluated and reported separately.

F. Release of Examinee Performance Data

NCEES may release examinee performance data to an ABET-accredited foreign educational program or to the foreign governing body or professional organization as provided in the contract or as approved by the board of directors.

Rationale

The committee added headings for consistency.

EPP Motion 18

Move that Exam Administration Policy 12 be amended as follows:

EAP 12 Exam Administration Audits

Member boards or their authorized representatives are required to participate in exam administration audits as established by the NCEES board of directors' exam administration audit plan in order to ensure consistency in exam administration and security.

Member boards or their authorized representatives will follow the procedures established in the Auditing Compliance with Exam Procedures section of the NCEES *Security and Administrative Procedures Manual*. These will include member board self-audits, onsite follow-up audits, and the use of current NCEES Compliance and Security Audit forms.

CBT examination forensics, including a secret shopper-type program ([which shall include a person who is requested to take the exam at a test center to verify quality assurance of the examination process](#)), may be performed in accordance with the vendor-NCEES contract. Secret shopper exposure to NCEES examination content is restricted to an NCEES staff member or a licensed engineer or surveyor who has already passed the appropriate NCEES exam.

Rationale

The committee added language for clarity.

EPP Motion 19

Move that Exam Administration Policy 13 be amended as follows:

EAP 13 Proctors for Administration of Pencil-and-Paper Examinations

Any person who teaches a refresher course or is actively involved in preparation of non-NCEES-sponsored review material for an NCEES [pencil-and-paper](#) examination shall not serve as a proctor for any NCEES examination.

Rationale

Added language to be concise so that the policy would include CBT vendor as well.



Committee on Examinations for Professional Engineers

Carmine Balascio, Ph.D., P.E., Chair

ABSTRACT

The Committee on Examinations for Professional Engineers (EPE) provides oversight to the exam development committees for all NCEES engineering exams. It held two meetings. At the first meeting in Atlanta, Georgia, on November 22–23, 2019, Director of Exam Services Timothy Miller, P.E., and Project Manager of Exam Services Lemon Dekle, P.E., presented updates to EPE members and exam development volunteers about the transition process of converting the Principles and Practice of Engineering (PE) exams from pencil-and-paper testing to computer-based testing (CBT). Staff also provided details about CBT exam formats, exam administrative considerations, supplied references, alternative item types (AITs), and recent developments. At the second meeting, held January 17–18, 2020, in Clemson, South Carolina, the committee concluded its discussions and developed recommendations related to the charges.

During the time between the two committee meetings, the committee circulated a proposed transition plan for converting the 16-hour pencil-and-paper PE Structural Engineering exam to CBT, with an emphasis on the constructed response afternoon module. At the second meeting, the exam development committee chairs presented updates on the status of their committee work. The Pearson VUE psychometric consultant who works on the NCEES CBT exams presented an overview of item statistics when paper-based tests convert to computer-based tests. Director of Exam Services Miller led a discussion of the proposed transition plan to CBT for the 16-hour Structural exam.

The EPE Committee addressed all of its charges and has several recommendations. The committee has no motions for Council action.

CHARGES

Charge 1

Accomplish all recurring committee activities:

- *Oversee the development and maintenance of necessary exam items for future Fundamentals of Engineering (FE) and PE examinations in accordance with current exam development policies, to include monitoring the preparation and submission of all examinations in a timely manner as set forth by NCEES guidelines.*

Based on reports from the exam development committees, the FE and PE exams have sufficient quantities of exam questions to create future exams.

The PE exam development committees continued to work on developing enough exam items to support the type of CBT exam that they plan to use for their PE exam discipline. The type of CBT exam chosen for a PE exam will largely depend upon the number of examinees who take that particular exam. Each exam development committee continued to develop a standalone reference manual for its exam and a list of available references that will be accessible during the exam.

Since the EPE meeting in January 2019, standard-setting studies (cut-score workshops) were conducted for the following exams:

- FE July 2020 CBT exam: Adopted cut scores were presented for all seven FE disciplines.
- PE Chemical January 2020 CBT exam: A cut score was adopted by the decision-making subcommittee, which resulted in a first-time pass rate of 69 percent.
- Electrical and Computer—Computer Engineering April 2019 pencil-and-paper exam (unscheduled cut-score workshop as a result of low examinee volume): A cut score was adopted by the decision-making subcommittee, which resulted in a first-time pass rate of 69 percent.
- PE Control Systems October 2019 pencil-and-paper exam: A cut score was adopted by the decision-making subcommittee, which resulted in a first-time pass rate of 64 percent.

Cut-score workshop planning for dates after the EPE January 2020 meeting

- PE Industrial and Systems October 2020 CBT exam: The cut-score workshop was held on February 21–22, 2020, in Clemson, South Carolina. Twelve panelists attended the meeting. The results will be reported to the EPE Committee in fall 2020.
- PE Nuclear October 2020 CBT exam: The cut-score workshop is planned for September 12, 2020, in Greenville, South Carolina. Fifteen panelists are scheduled to attend the workshop.
- Conduct professional activities and knowledge studies (PAKS) as appropriate to update exam specifications.
The status and update of the following PAKS were presented at the November 2019 EPE meeting:
 - PE Agricultural and Biological Engineering
 - PE Civil
 - PE Industrial and Systems
 - PE Nuclear (exam specification approval): The PAKS survey was completed in December 2018, and the specification meeting was held in June 2019. The new PE Nuclear exam specifications were presented and approved by the EPE Committee.
 - PE Petroleum

The status and update of the following PAKS were presented at the January 2020 EPE meeting:

- PE Agricultural and Biological Engineering
- PE Civil
- PE Metallurgical and Materials extension request
 - The PE Metallurgical and Materials exam development committee requested an extension to hold the PAKS at nine years to avoid overloading the committee during the CBT transition.
 - At the EPE meeting, a motion was made to allow an extension of one year for the upcoming PAKS. A voice vote was held, and the motion passed.
- PE Petroleum
- Review the Examination Audit Committee's recommendations, and ensure implementation of any changes approved by the NCEES board of directors.
The Exam Audit Committee conducted the following exam audits in January 2019. The EPE Committee received the exam audit report results at its November 2019 meeting. No actions were necessary.
 - PE Architectural April 2018 pencil-and-paper anchor exam
 - PE Electrical and Computer April 2018 pencil-and-paper anchor exams (three exams)
 - PE Environmental April 2018 pencil-and-paper anchor exam
 - PE Fire Protection April 2018 pencil-and-paper anchor exam
 - PE 16-hour Structural April 2018 pencil-and-paper anchor exam
- Monitor training of the exam development subcommittee members to ensure that they understand the concepts of scaling, equating, setting cut scores, and constructing examinations.

Psychometric training

Psychometric training sessions are conducted before at least one EPE meeting each year. Before the November 2019 EPE meeting, the Pearson VUE psychometric consultant conducted a one-day training course in basic psychometrics and exam development procedures. The training session is intended for new EPE members, exam development committee chairs, and any returning volunteers who need a refresher course. At the January meeting, the same consultant presented an overview of item statistics when pencil-and-paper exams convert to computer-based tests.

Group 2 examinations

Director of Exam Services Miller provided an update on the transition of NCEES assuming exam development responsibility of Group 2 exams.

- EPE recommended and the NCEES board of directors approved assuming financial responsibility and liability for the exam development of the Group 2 exams as they transition to CBT.
- Memorandums of understanding (MOUs) have been executed between NCEES and the following societies:

- American Nuclear Society
- Society of Petroleum Engineers
- Society of Fire Protection Engineers
- Institute of Industrial and Systems Engineers
- Discussions are ongoing with the Society for Mining, Metallurgy, and Exploration.

The MOU will say that society may continue to produce a sample exam (separate from exam development volunteers) and sell. NCEES may also develop and sell a sample exam.

The supplied reference is the main question. Will the society own it, maintain it, and allow NCEES/Pearson VUE to provide it electronically on exam day, or will the society transfer ownership and maintenance responsibility to NCEES once it has been developed for the first offering?

CBT transition schedule

Project Manager of Exam Services Dekle presented a revised and updated schedule for CBT transition that illustrates the planned transitions of the examinations and the type of examination each would become in the CBT environment. Different CBT exam formats are being used based on examinee population.

The current summary is as follows:

	Group 1 exams	Exam type	Group 2 exams*	Exam type	Exams (publications) converting
2018 (Year 1)	CHE✓	LOFT	NUC✓	LFF	2 (2)
2019 (Year 2)	ENV✓	LOFT	PET✓	LFF	2 (2)
2020 (Year 3)	MEC (3)	LOFT	FPE, IND	LFF, LFF	3 (5)
2021 (Year 4)	ELEC (3)	LOFT*, LFF, LFF	AGR, MIN	LFF, LFF	3 (5)
2022 (Year 5)	n/a		ARC, NAME, MET, CSE	LFF, LFF, LFF, LFF	4 (4)
2023 (Year 6)	CIV (5)	LOFT	n/a		1 (5)
2024 (Year 7)	STR		n/a		1 (2)
Totals	6 (15)		10 (10)		16 (25)

*The PE Software exam was removed from list due to the discontinuation of the exam, after April 2019.

**Only the Power discipline exam will be LOFT.

Current CBT exams

- FE (seven disciplines)
- FS
- PS
- PE Chemical
- PE Nuclear
- PE Environmental
- PE Mechanical
- PE Petroleum

Next CBT conversions

- PE Fire Protection: October 2020
- PE Industrial and Systems: October 2020
- PE Electrical and Computer: Power: January 2021

The types of statistics to be used with each examination and the types of each examination continue to be discussed regularly so that all committees are able to work through the transition process from the existing pencil-and-paper format to the CBT format.

16-hour Structural Engineering exam

A proposal for conversion of the 16-hour Structural Engineering exam to CBT was presented by Director of Exam Services Miller at the January 2020 EPE meeting. Miller discussed the history of the exam, the current format of the exam, and the proposed format. The following is a summary of the minutes:

- Use a scenario format with AITs for the afternoon portion of the exam. Once the concept is agreed to in principle by the stakeholders (member boards that require 16 hours of structural testing for structural engineering licensure) and approved by the EPE Committee, the final conversion date and detailed schedule will be determined.
- Under this proposal, the exam will continue to be a two-component exam (Lateral and Vertical), and each component will continue to include two portions (morning and afternoon). The morning and afternoon portions will be tested separately and graded independently.
- Under this proposal, the rigor of the exam and the intent for which it was originally designed will not be altered.
- Present to stakeholders (member boards that require 16 hours of structural engineering testing to practice structural engineering in their jurisdiction) to obtain input.
- Once approved in concept, determine how to handle examinees who have already obtained acceptable results for a pencil-and-paper component.
- Once approved in concept, discuss with stakeholders if the five-year rolling clock for obtaining acceptable results on both components should still apply to the structural exam.

EPE Committee members support the plan to move forward with the transition to CBT and are confident that the structural exam development committee will be able to develop questions that can test for minimal competency with reliability comparable to the existing structural exam.

- *Review NCEES exam policies and procedures, and refer any recommendations to the Committee on Examination Policy and Procedures (EPP) for appropriate action.*

The EPE chair attended the January 24–25, 2020, EPP Committee meeting and participated in the review of a number of examination development policies and examination administration policies. A summary of those discussions, as well as resulting recommendations and motions for Council action, are included in the EPP Committee report.

- *Ensure appropriate use of codes and standards for examinations.*

One of the critical tasks facing all PE exam development committees is to decide how the codes and standards can best be used or transformed into user-friendly electronic documents that are compatible with the transition of the exams to CBT. NCEES staff have met with each exam committee to review topics relating to closed-book reference alternatives, reference scope, copyright/permissions, media deployment, AITs, and preparation of the item bank for CBT. Many committees reported considerable progress in achieving this goal. An added task is the incorporation of AITs into the exam committee item banks in preparation for the transition to CBT. Each committee has had training to help it develop and incorporate AIT processes, determine where AITs are an improvement over standard multiple-choice items, and identify the hard-to-write-for topic areas.

Charge 2

Implement the plan for increasing exam volunteer diversity as described in the 2018–19 EPE Committee report. Further develop guidelines for how this plan will be maintained in the future.

Most of the EPE discussion focused on appropriate methods for gathering data regarding diversity targets, particularly data for FE exam takers.

The committee reviewed the process recommended last year. In the ensuing discussion with returning and new participants, two comments arose that should be incorporated moving forward.

First, it was noted that the target population of FE exam passers may not be appropriate for establishing benchmarks for the FE Committee. It was noted that most of the discussion in previous years on this issue centered more on the target populations for use in benchmarks for PE exam committees. Further, while there are some sources of data for graduating engineers that may be used to identify ethnic groups, gender, and regional geographic affiliations, answers to questions related to pursuit of licensure and area of practice are not generally available. The consensus was that further evaluation should be conducted.

One course of action is to collect national data for graduating engineers and compare them to the FE exam passer data collected to see if significant differences exist between the two groups in terms of ethnicity, gender, and regional geographic affiliations. If there are significant differences, then perhaps the benchmark population for the FE Committee should be revised.

Second, it was noted that the proposed data collection process should include a statement of purpose so that future participants in the process are aware of the motivations.

A statement of purpose has been added and the proposed process has been renamed as the NCEES Exam Development Volunteer Diversity Monitoring plan (see below). In reviewing the progress on the steps, staff reported the NCEES E3 data management system for exam development volunteers would be able to provide data on each of the exam committees for the 2020–21 EPE Committee reports. Development of the FE exam passer data collection tool (a survey) has not yet started, given the workloads and the need to relocate NCEES staff to Greenville. However, NCEES staff was directed to initiate this development of the survey instrument as early as practicable.

Following this review of the previous year's effort, the focus shifted to part two of the charge, which is to develop guidelines on how the committee will maintain the NCEES Exam Development Diversity Monitoring plan. The committee recommends that the following should be added to the recurring charges under the standing EPE Charge 1 each year:

- Annually review exam development committee member data and compare with benchmarks as established by the EPE Committee as part of the NCEES Exam Development Volunteer Diversity Monitoring plan.
- Annually review progress on data collection from target populations.
- Conduct a review of the NCEES Exam Development Volunteer Diversity Monitoring plan on a periodic basis. The time between reviews shall not exceed six years.
- Establish exam development committee membership benchmarks. Review and modify them as needed every five years (in calendar years) that end in zero or five (e.g., 2020, 2025, 2030).

NCEES Exam Development Volunteer Diversity Monitoring plan

Revision date: 12-3-2019

Purpose: To ensure equity and quality control in the development of exams for future professional engineers, the NCEES EPE Committee has prepared this plan for monitoring the makeup of its exam committees and ensuring that exam developers appropriately reflect the exam-taker populations.

The following three-step process will constitute the NCEES Exam Development Volunteer Diversity Monitoring plan.

Step 1: Data collection

Data will need to be collected from two sources. First, it will need to be collected for the benchmark population of those who have passed the FE exam. Second, NCEES will need to collect data from committee volunteers.

- FE exam passers
For this group, a survey should be sent to each person who passes the FE exam to solicit participation in a survey with five questions. This request should be sent as soon as the person is notified of passing. It could be part of the same email. The reason is that, at this juncture, NCEES will have a working email address and the email is very likely to be read. Data should be collected on a continuous basis. With the service NCEES uses to conduct surveys, it should be possible to provide a link that is accessible by each individual participant. The data should be analyzed/reviewed on a periodic basis (maybe annually).

The questions that should be asked are as follows:

- Do you plan on becoming licensed as a P.E.?
- Which PE exam do you think you will take? (select from dropdown menu)
- Where do you plan on practicing? (select from dropdown menu)
- Your gender (select from dropdown menu)
- Your ethnicity (select from dropdown menu)

- Committee volunteers
 - As NCEES develops an online system for keeping track of committee volunteers, it should ask the following questions, at a minimum:
 - How many years of experience do you have? (overall, post license, and on committees)
 - What is your industry type? (consulting/private, government, industry)
 - Where are you licensed? (list of U.S. states/territories and other for non-U.S. licensure)
 - Your gender (select from dropdown menu)
 - Your ethnicity (select from dropdown menu)

Committee chairs will use this information to report back to the EPE Committee on exam development committee makeup.

Step 2: Establish benchmarks

After sufficient data has been collected from people who pass the FE exam, EPE should establish benchmarks for ethnicity, gender, and regions of practice. EPE may choose to establish benchmarks by discipline if sufficient data exist to do so from the survey. Benchmarks should be revised every five years. However, data used to develop benchmarks should be reviewed annually by EPE to monitor trends.

Some consideration will need to be given to how many responses will be needed to be deemed sufficient. Because the goal is to seek statistically significant responses, assistance from statisticians may be needed. Perhaps NCEES psychometricians can assist since this is similar to sample size determination for occupational surveys. At a minimum, each discipline will probably need 200 responses before trying to establish benchmarks for the entire population. Getting 200 responses per discipline may prove difficult, so a smaller number might have to be used for discipline-specific benchmarks.

Step 3: Monitor committee diversity

Each exam development committee should present data collected by NCEES on its committee makeup to EPE as part of its annual presentation and show comparisons to benchmarks, where appropriate. Committees should provide data on the following for their active participants:

- Gender distribution with benchmark comparison
- Ethnic distribution with benchmark comparison
- Regional distribution with benchmark comparison
- Experience distribution
- Years of service to committee distribution
- Industry type distribution

Since the majority of the data will not change every year, the exam development presentations should highlight changes from year to year, when applicable.

Charge 3

Develop guidelines for recruitment, leadership, and membership for exam development committee volunteers. In developing the guidelines, review the NCEES Exam Development Procedures Manual to gain a thorough understanding of what is presently included with regard to this subject.

Guidelines for recruitment, leadership, and membership shall be as follows:

Recruitment guidelines

- Consider inviting examinees that make professional and competent comments on exam items or the reference handbook after they pass the PE exam and have a P.E. license.
- Ask current volunteers to nominate known engineers for the committee.
- Consider PAKS/cut-score participants who performed well.
- Email recent passers to ask them to complete a survey for consideration for committee membership.
- Participate at national technical society meetings to recruit new members, with the possibility of NCEES supporting exam committees that need extra assistance, i.e., having NCEES staff at selected meetings or providing material for distribution at the meetings.

- Promote membership using technical/professional organizations' websites and publications to show that NCEES has a volunteer interest page on the NCEES website.
- Investigate using the NCEES LinkedIn site as a resource for outreach.

Note: Exam development meeting locations can affect recruitment numbers for some exam committees. Those affected committees should work with their NCEES exam development engineer to encourage having NCEES support meetings outside NCEES headquarters when and if appropriate.

Leadership guidelines

Each committee shall adopt and maintain a written leadership plan (including succession).

EPE recommends that committees post their existing leadership plans and share them on Basecamp. The PE Mechanical exam development committee has made available not only its plans but has adopted them as a template for both standalone and breadth/depth exams for possible adoption/modification.

A review of leadership training availability within NCEES is required, and some form of leadership training for the chair/chair-elect/vice presidents, etc., should be incorporated as part of preparation for leadership.

Membership guidelines

The *Exam Development Procedures Manual* states in Section 1.2, "Each person involved as an item writer, pass-point evaluator, reviewer, or scorer for the NCEES PE or PS examinations must have an active professional license issued by an NCEES member board, must be qualified in the appropriate discipline, and must be familiar with requirements for and capabilities of candidates who are minimally qualified to practice in that discipline. Engineers and surveyors with licenses that have inactive or retired status are ineligible to serve in these positions."

Based on feedback from the EPE Committee members, the exam committee chairs/representatives, and the NCEES staff, below are suggestions for dealing with retention, removal, and downsizing of committee members.

- With the transition to CBT, the makeup of the exam committees may change, either increasing, decreasing, or having a need for different skills in the membership makeup.
- It is critical to establish and retain a core membership group with the skills and knowledge areas needed to develop consistent and valid exams. The members should be those who best add value to the committee.
- Members may provide expert levels of knowledge in multiple areas and be highly productive or may be needed because they provide skills in only one knowledge area that is not well represented in the profession.
- Leadership advancement may play a role in who is retained.
- Diversity goals are an important consideration in recruiting and retaining members.
- A consideration of available younger members is necessary to avoid having a membership made up of only older professionals who may not represent the profession as it is currently being practiced. At the same time, having seasoned professionals able to contribute time to the committee is also useful.
- The goal is to recruit, train, and retain highly productive members in all of the specific knowledge areas.
- There are three cases of members who may present problems to the committee:
 - Long-time effective members who may no longer be able to contribute at a high level. It is always difficult to tell a long-time member that he or she is not effective and will no longer be invited to the meetings. EPE advises discussion with the exam development committee leadership and the NCEES exam development engineer for the exam to find the gentlest way to inform the person that his or her contributions are appreciated but no longer needed. A letter from NCEES and the committee recognizing the person's contributions would be appropriate.
 - Bullies and those with inflexible opinions are destructive to the committee and will not be tolerated, regardless of their ability. They can destroy a team. However, strong opinions by flexible professionals are necessary. Members need to understand that defending their opinions is an important part of the development process.
 - Personality clashes may occur and can be dealt with by selecting subgroups that seem to work best together or by isolation. Again, the team dynamics are best served by those who are willing to work as team members. If a clash is too destructive to the group, a decision must be made on who is retained and who is not invited back.
- To reduce potential future problems, it is important to ensure that existing and new members understand their responsibilities as members. Although friendships form an important part of what brings many

members back year after year, it is critical that members understand that the exam committees are not social clubs. Critical work is done at each meeting, and time constraints impact committee schedules.

- An initial training session on item writing and expectations, a written set of expectations for the committee members to read and sign and/or the use of mentors could be means of ensuring that new members understand their responsibilities and could help existing members remember why they are invited to the meetings.

The single most powerful tool committee leadership has available to them is to not invite anyone to the meeting who does not contribute at a level needed by the committee. Each committee's NCEES exam development engineer is a great resource to assist in doing this.

Respectfully submitted, the **Committee on Examinations for Professional Engineers:**

Carmine Balascio, Ph.D., P.E., Chair
Mohammad (Dr. Q) Qureshi, Ph.D., P.E., Vice Chair

Members

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Laura Sievers, P.E.
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Board liaison

Christopher Knotts, P.E.

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Committee on Examinations for Professional Surveyors

Scott Bishop, P.S., Chair

ABSTRACT

The Committee on Examinations for Professional Surveyors (EPS) supervises the preparation of exam specifications and is responsible for the content and scoring of all Fundamentals of Surveying (FS) and Principles and Practice of Surveying (PS) examinations.

The committee was assigned four charges. The committee held two face-to-face meetings to address these charges—the first in Providence, Rhode Island, and the second at NCEES headquarters in Clemson, South Carolina. During the first meeting, the committee discussed all of the charges. With regard to Charge 3, it identified key milestones, drafted a letter of intent to be sent to all member boards, created a plan, and created a draft outline to follow as NCEES begins implementation of the divisional exams.

Between meetings, the committee members used Basecamp to continue discussions and revise the draft conclusions until the second face-to-face meeting.

At the second meeting, the committee finalized a letter to be sent to all boards informing them of the divisional exams and to assist in gathering additional information. The committee has no motions for Council action.

CHARGES

Charge 1

Accomplish all recurring committee activities:

- *Oversee the development and maintenance of necessary exam items for future FS and PS exams in accordance with existing exam development policies.*
- *Review and evaluate exam administrations for conformity of results; prepare, review, and refine future examinations.*
- *Review the pass rates and item performance for recent exam administrations.*
- *Review the Committee on Examination Audit's recommendations and ensure implementation of any changes approved by the NCEES board of directors.*

The committee received reports from the NCEES Director of Exam Services Tim Miller, P.E., as well as the FS and PS exam development committee chairs and found that the exams are being produced and administered in accordance with NCEES exam development policies. The committee noted some discrepancies with the trends of pass rates and will continue to work with staff to monitor the results.

Charge 2

Implement the plan for increasing exam volunteer diversity as described in the 2018–19 EPS Committee report. Further develop guidelines for how this plan will be maintained in the future.

The FS and PS exam development committee chairs provided a report to the committee at the January 2020 meeting comparing the diversity data gathered from the 2010–18 exam candidate surveys to the diversity of the FS and PS exam subject-matter expert groups that met in June 2019 and January 2020. Based on the report, the EPS Committee believes that the subject-matter expert demographics reflect the population of recent examinees in the areas of practice in the profession as well as the experience, gender, and ethnic backgrounds.

This same reporting and approval process will continue at each EPS meeting in the future.

Charge 3

Develop and begin implementing a plan to restructure the PS examination into the following separately scored divisions as described in the 2018–19 Surveying Exam Module Task Force motion:

- Core PS
- Boundary
- Public Land Survey System (PLSS)
- Mapping science
- Incidental drainage design

The committee began this charge by identifying key milestones and creating a potential timeline for implementation on the divisional exams. Those milestones include the following items:

- Develop and distribute a letter of intent to be sent to each member board. The letter was sent in February 2020. Accompanying this letter was a questionnaire to assist the committee and Pearson VUE with gathering data necessary to determine candidate volumes. NCEES staff will monitor responses and follow up with member boards to ensure maximum input.
- Before the professional activities and knowledge study (PAKS) meeting, convene a meeting with practicing surveyors with experience in the PAKS areas. The intent of this meeting is to gather information for divisions that do not currently have a technical specification.
This pre-PAKS meeting was scheduled for April 2020 in Dallas, Texas, but was postponed due to the COVID-19 pandemic. It will either be rescheduled or held as a web conference.
- Review information gathered from Pearson VUE, the pre-PAKS meeting, and responses to the letter of intent questionnaire. As the committee continues doing this, it will begin to
 - Identify potential volumes
 - Identify potential costs
 - Determine exam structure (time, number of questions, and frequency of offering)
- Based on obtained data, make a final determination during the fall 2020 EPS Committee meeting.
- Begin the formal PAKS process.
- Provide ample notice to member boards to ensure there is time for any *Model Law* or *Model Rules* changes, as well as possible changes to exam administration and exam development policies.

Based on the above items, the committee determined that the new divisional PS exam could potentially go live in the spring of 2024. The schedule will be monitored and modified as the plan develops.

Respectfully submitted, the **Committee on Examinations for Professional Surveyors:**

Scott Bishop, P.S., Chair
Aaron Morris, P.L.S., Vice Chair

Members

Aaron Blasidell, P.L.S.
William (Davey) Edwards, Ph.D., P.L.S., L.S.
Larry Graham, P.E., L.S.
Douglas Lechner, L.S.
Ginger Michalski-Wallace, P.S.
Pamela Nobles, P.S.M.
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Richard Smith Jr., P.S.
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Joseph Wichert, L.S.
Steven Wilson, P.E., P.L.S.

Consultants

William Karr, P.S.
Richard (Ric) Moore, P.L.S.
Scott Phillips, P.E., P.L.S.

Board liaison

Timothy Lingerfelt, P.L.S.

Staff liaison

Timothy Miller, P.E.



Committee on Law Enforcement

Karl Tonander, P.E., Chair

ABSTRACT

The Committee on Law Enforcement was established under NCEES *Bylaws* 7.10. The committee considers and recommends methods for member boards to achieve more efficient and uniform enforcement of licensing acts necessary for greater interstate coordination.

This year's committee addressed 10 charges and prepared recommendations for each charge through the NCEES Basecamp and a one-day face-to-face meeting. The committee has no motions for Council action.

CHARGES

Charge 1

Evaluate the 2019 annual meeting Law Enforcement Program and Forum. Organize similar activities for the 2020 annual meeting.

2019 forum and program

Feedback from the 2019 Friday forum was generally favorable, with an isolated negative comment regarding the significant flexibility shown during the question-and-answer session that followed the formal presentations. Feedback from the 2019 Saturday program was also generally favorable, but again with an isolated negative comment regarding the applicability of the information and the approach taken by the presenter.

2020 forum

The Friday forum will focus on challenges to professional licensure and public protection. The public continues to face attempts to reduce the protections afforded by professional licensure. Melissa Cornelius, Esq., executive director of the Arizona State Board of Technical Registration, will discuss proposals impacting enforcement in Arizona. Karl Tonander, P.E., member of the New Mexico Board of Licensure for Professional Engineers and Professional Surveyors, will review other licensure-impacting changes in several Western Zone states. Issues from the floor will also be discussed as time permits.

2020 program

The Saturday program will be "Investigative Interviewing Techniques." This session will focus on the verbal and nonverbal behaviors that are displayed by a person who is telling the truth during a non-accusatory interview, as well as those displayed by a person who is withholding or fabricating relevant information. The group will also discuss interviewing techniques designed to elicit information in a noncoercive manner from adverse or reluctant witnesses during the investigative interview.

Charge 2

Publish an ongoing column in Licensure Exchange (six issues per year) related to law enforcement issues.

The following Enforcement Beat articles ran in *Licensure Exchange* in the 2019–20 fiscal year:

- October 2019: Area of expertise (Marc Barter, P.E., S.E.)
- December 2019: The key to ethics is recognizing the gray area (Griffin Pritchard)
- February 2020: Boards face many of the same enforcement challenges (group collaboration)
- April 2020: Considering the rules of professional conduct during board investigations (James Szatkowski, P.E.)
- June 2020: Preparation is key for expert witness testimony (Rick Huett)
- August 2020: Expungement in the digital age (Karl Tonander, P.E.)

Charge 3

Review Enforcement Exchange, and recommend changes to NCEES staff. For identity verification, review a requirement to make date of birth a mandatory entry.

The underlying concern is how best to uniquely identify individuals tracked in Enforcement Exchange without using data that is restricted in jurisdictions, such as social security numbers. While a date of birth is a mandatory entry for an individual's account in the NCEES E3 database system, the date of birth entry in Enforcement Exchange is currently an optional entry. Having a date of birth would make the verification process easier and more reliable. However, being an optional field, a date of birth is not included in profiles of 31 percent of the individuals listed in Enforcement Exchange.

Some member boards do not allow a date of birth or other personal information to be included in Enforcement Exchange. If the date of birth were to be made mandatory, some member boards would be forced to decide whether to participate. In addition, if an unlicensed individual has an enforcement action, the member board may not have access to his or her date of birth, thereby preventing the member board from entering the individual into Enforcement Exchange.

The committee feels that the date of birth should not be mandatory in Enforcement Exchange at this time because of information limitations by some member boards. One alternative would be to make it mandatory to either complete the date of birth field or check a box acknowledging that the information cannot be provided. This would at least emphasize the preference of data entry into the field as a key tracking mechanism. Other relatively unique information (e.g., graduating university and year) could be added as nonmandatory fields, but the committee has concerns that adding additional fields could discourage the use of Enforcement Exchange.

Charge 4

Review and make recommendation as to whether NCEES should enter this information into Enforcement Exchange for exam results invalidated by NCEES.

As background for the discussion of the charge, NCEES Manager of Compliance and Security Bob Whorton, P.E., provided detailed information regarding the existing policies and the frequency and nature of exam invalidations. More specifically, section D of Exam Administrative Policy 8, Release and Use of Examination Results, states that examination results for any examinee who fails to comply with the conditions stated in the *NCEES Examinee Guide* are subject to invalidation by NCEES in accordance with the first list below. Exam irregularities that may be grounds for exam invalidation by the member boards are included in the second list below. The identity of any examinee whose results are invalidated and the reason for invalidation are provided to the affected member board.

Per EAP 8, the following items in the *NCEES Examinee Guide* are grounds for a candidate to be dismissed from the exam room and for a candidate's pencil-and-paper exam results to be invalidated by NCEES:

- Having a device with copying, recording, or communication capabilities in his or her possession
- Having a calculator that is not on the NCEES-approved list
- Removing pages from his or her exam booklet on pencil-and-paper examinations
- Leaving the exam area without authorization

EAP 8 notes that the following are the items in the *NCEES Examinee Guide* that are grounds for a candidate's pencil-and-paper exam results to be invalidated by a member board:

- Having loose papers, legal pads, writing tablets, or unbound notes in his or her possession
- Using a non-NCEES writing instrument or eraser to complete any portion of the exam
- Beginning the exam before the proctor instructs him or her to do so
- Failing to stop writing immediately when time is called on pencil-and-paper examinations
- Writing on anything other than the exam booklet or answer sheet on pencil-and-paper examinations
- Violating any other terms stated in these regulations that are cause for dismissal or exam invalidation

The following item in the *NCEES Examinee Guide* falls under collusion and is already grounds for invalidation by the member boards:

- Copying from another examinee's answer sheet or colluding with other examinees

For computer-based exams, examinees who fail to comply with the conditions in the *NCEES Examinee Guide* could have their results invalidated by NCEES. Evidence of an exam irregularity may be based on the performance of the examinee, a report from an administrator or a third party, or other information. All irregularities are reviewed by the NCEES compliance and security manager.

The following are typical reasons an examinee's exam results are invalidated by NCEES:

- Having a prohibited item in the testing room
- Accessing a cell phone during an unscheduled break
- Testing twice during a testing window

If an examinee fails to comply with the conditions in the *NCEES Examinee Guide*, the NCEES chief executive officer, NCEES chief operating officer, and NCEES director of Exam Services review the irregularity and make the decision on whether to invalidate.

NCEES will report the identity of the examinee and the reason for invalidation to the affected member board. Based on their rules and laws, member boards should review the irregularity and determine if additional sanctions, such as restrictions on future testing, are required.

From June 2018 to July 2019, six incidents resulted in the invalidation of an examinee's results for a computer-based exam:

- 1 examinee for exiting the test center during an unscheduled break
- 1 examinee for possessing a prohibited item (reference notes; plus banned for six months)
- 1 examinee for possessing exam materials (took photos of his scratch work; plus banned for three years)
- 3 examinees for testing twice during a testing window

Member boards have the ability to add to Enforcement Exchange the names of individuals who failed to comply with the conditions in the *NCEES Examinee Guide* and therefore had their results invalidated, although there is no indication which boards (if any) have actually done this. At present, the Violations dropdown menu in Enforcement Exchange includes Exam Irregularity; the Penalties dropdown menu does not include Exam Invalidation, but this could be added.

Since 2000, there have been very few irregularities that would be considered egregious. They include the following:

- Examinee who modified a calculator and scanned exam content
- Examinee who had a hidden camera and copied exam content
- Examinee who verbally recorded exam content on a watch
- Examinee who permitted impersonation by another individual/examinee (surrogate/proxy testing)

The first two candidates were criminally prosecuted. They, along with the third candidate, were also banned from taking future NCEES exams. Both of the last two candidates (surrogate/proxy testing) were banned from taking future NCEES exams for three years. This is the maximum penalty allowed per the rules of the member board.

Three basic questions were evaluated as a result of the discussion.

- Should NCEES enter this information into Enforcement Exchange for individuals whose exam results were invalidated by NCEES?
- Should exam irregularities be part on an individual's Enforcement Exchange record?
- Should member boards enter details of the exam irregularities into Enforcement Exchange?

Some member boards do not regulate action by unlicensed individuals, including those that are taking the professional licensure exam. By design, Enforcement Exchange only contains information uploaded by member boards. If a board takes action, even on exam violations, that would go in Enforcement Exchange. If NCEES

takes action, that would remain in the E3 database system, which addresses exam-related issues. Hence, the answer to each of the three above questions is no. The Law Enforcement Committee therefore recommends no changes.

Charge 5

Review the Investigation and Enforcement Guidelines and Investigative Training Manual; revise as appropriate.

The discussion during the committee's February 2020 face-to-face meeting centered on the voluminous size of the two documents and how that creates a difficulty in thorough review on a regular basis. After reviewing the documents, the committee identified no needed changes in the body of either document. However, it does recommend that a specific review of the appendices of both documents be completed in the future, as they need to be modernized. Particular attention should be paid to incorporating appropriate references to electronic media, electronic advertising, and removing outdated references.

Charge 6

Identify, contact, and mentor new law enforcement staff. Review procedure to contact these individuals.

Charge 6 is essentially a continuation of the 2018–19 Law Enforcement Committee's Charge 7. The discussion of this year's charge focused on the potential to streamline the process of identifying and communicating with new law enforcement staff. Current practice is for NCEES staff to request annual updates regarding law enforcement personnel from the various member boards and to forward any new additions to Manager of Compliance and Security Whorton and the committee chair. The chair then writes a letter to each new law enforcement officer advising them of the NCEES resources available to them and inviting them to participate in enforcement activities at the zone and annual meetings.

The committee agreed that streamlining the process would be favorable to the current method, especially in light of the change in the committee chair every two years. Instead of the initial welcome coming from the Law Enforcement Committee, the committee recommends that NCEES staff send a welcome email that would include information about the Law Enforcement Basecamp project, Enforcement Exchange, the Enforcement Beat column in *Licensure Exchange*, Enforcement Resources (law enforcement directory, back issues of Enforcement Beat articles, enforcement training videos, written guidelines and recommendations, etc.), *Investigation and Enforcement Guidelines*, *Investigative Training Manual*, annual meeting programs, and the Law Enforcement Committee. The committee chair would be copied on this email and would then offer a secondary welcome, elaborating on these or other topics. This would immediately provide two points of contact and, likely, a more rapid and consistent initial response.

Charge 7

Develop a user guide for Enforcement Exchange. Include instructions for entering data and provide best practice recommendations.

Committee member David Blume, P.E., coordinated the development of a full instruction manual patterned on a prior version crafted in 2018. The resultant document includes graphical and narrative instruction on how to effectively use Enforcement Exchange. The user guide will be available as a MyNCEES Enforcement resource.

Included are several best practices suggested by Manager of Compliance and Security Whorton, including the following:

- Assign a designated staff person(s) to add violations.
- Add violations on a regular basis (for example, monthly) after a board meeting.
- Upload consent/settlement order documentation to provide easy access for other member boards.
- Conduct a monthly search/export of people and firms and compare that list against the board's licensees to identify new violation entries from other jurisdictions.

Charge 8

Prepare educational materials that teach students and young engineering and surveying professionals about laws, rules, and ethics. Include information about common disciplinary actions taken by member boards and how to avoid these situations as a young professional. Add materials to the Enforcement Resources. Make recommendations to promote these materials.

Committee member Bruce Pitts, P.L.S., solicited input from the Ohio State Board of Registration for Professional Engineers and Surveyors, which is very active in student outreach, and found that it has developed significant materials on which to base suitable educational materials. Specifically, the Ohio board has completed presentations for students and new licensees for many years. The presentation for the new licensees is more comprehensive and covers laws, rules, code of ethics (including an overview of what the code covers, how it was developed, and where to find it), common violations of the registration act and how to avoid them, licensure requirements, enforcement (investigation and disciplinary process; requirement to be truthful, cooperate, and provide records; and their duty to report suspected violations of the registration act and how to do this). Given that this material has been vetted through use for several presentation cycles, the committee feels that the most prudent use of resources would be to gather and review this existing information before developing anything new.

Promotion of the material was also discussed, as the response from universities is highly variable. Some welcome board involvement, and others are nonresponsive. Again, referring to the practice of the Ohio board, free two- to four-hour presentations with professional development credit are offered to all new licensees. More generally, presentations outside the university setting—such as at professional society meetings—have mixed receptions due to the perception that the free presentations may detract from other revenue-generating presentations of a society.

The committee recommends a review of the available materials from the Ohio board and further research into similar materials from other member boards. Once coalesced into a uniform presentation and through reference to the *Model Law* and *Model Rules*, the material could be made available for use at large.

Promotion of these materials is considerably more difficult due to the lack of consistency between reception of such presentations at the university level. However, increasing outreach from the member boards consistent with other awareness programs—such as a graduate honor cord presentation—may be useful and bridging the communication barrier.

Charge 9

Obtain information from member boards and other professional licensing boards concerning policies toward expungement of disciplinary actions. Determine what type of offenses are eligible for expungement and the period of time that must transpire before disciplinary action can be expunged. Develop recommendations for member boards to use to establish uniform policies towards expungement and incorporate these recommendations into the Investigation and Enforcement Guidelines.

The committee completed a brief survey of member board administrators regarding whether their jurisdictions have policies toward expungement of disciplinary actions, and, if so, what they are. The results of the survey indicate that no responding member boards currently allow expungement, although two are considering it. Given the lack of current focus on expungement at the member board level, there was no consensus regarding the appropriate period of time prior to expungement or the nature of the violation that would qualify.

Further, several possible difficulties with expungement were discussed, particularly as relates to expedited comity between member boards. In many cases, expedited comity considers the disciplinary record of the applicant; the lack of a complete record would make a review more complex.

The level of interest in expungement at the member board level appears minimal, and NCEES would, in this case, be developing policy in advance of the jurisdictions. No specific criteria were developed or suggested by the committee at this time regarding the period of time or violations to be expunged.

However, should expungement be considered by a member board, it should be handled like any other record removal from Enforcement Exchange. If removal of a disciplinary record is desired, NCEES needs to be notified by the originating member board to remove the original record. Subsequent entries for reciprocal action would stand until requested for removal by those other member boards.

Charge 10

Review the reporting of disciplinary action for an NCEES Record and how that relates to Enforcement Exchange. Review the feasibility of notifying member boards when an individual discloses a new disciplinary action. Review the questions related to disciplinary action for an NCEES Record and recommend changes, if required.

NCEES does not maintain a full list of licensees for all member boards, and not all licensees maintain MyNCEES Records in the E3 database system. Even if individual member board lists were obtained, correlation of licensees by name would be inconsistent due to a lack of unique identifiers (e.g., date of birth, social security number) allowed by some member boards. Current NCEES practice is to link disciplinary actions between the E3 database and Enforcement Exchange systems, but that can be affirmatively done only when the individual self-reports into the E3 database system. Either way, there is no path to ensure that all jurisdictions where the registrant is active can be notified or even identified.

The committee also reviewed the following questions pertaining to disciplinary action, which are currently included:

- Have you ever been reprimanded by a jurisdiction? If yes, identify jurisdiction(s) and explain.
- Has any jurisdiction ever revoked or suspended your license? If yes, identify jurisdiction(s) and explain.

The committee identified concerns that the existing language may lead to some ambiguity but that providing an overly detailed question list may limit a respondent's participation. Further, there remains a lack of uniformity as to what qualifies as an actual disciplinary measure (such as a letter of reprimand versus consent order).

Language for a revised question recommended by the committee from a prior year was considered, and it recommends the following revision:

Have you even been disciplined by a professional licensing jurisdiction or voluntarily surrendered a professional license in lieu of disciplinary action? If yes, identify jurisdiction(s) and explain. The term "disciplinary action" shall mean any final written decision or settlement taken against an individual or firm by a licensing board based upon a violation of the board's laws or rules. Disciplinary actions include reprimands, administrative fines, the board's refusal to issue, restore or renew a license, Settlement Agreements or Consent Orders, probation, suspension, revocation or any combination thereof.

The committee recommends that the questions related to disciplinary action for an NCEES Record be updated.

Respectfully submitted, the **Committee on Law Enforcement:**

Karl Tonander, P.E., Chair

Members

Aaron Armstrong, P.E.
David Blume, P.E.
William (Rick) Huett
Bruce Pitts, P.L.S.
Jill Short
James Szatkowski, P.E.
Amanda Uwague
James Valenti, P.E.

Board liaison

Marlon Vogt, P.E.

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Bob Whorton, P.E.



Committee on Member Board Administrators

Heather Richardson, Chair

ABSTRACT

The Committee on Member Board Administrators (MBAs) was established as a forum for the MBAs to convene and provide input on Council issues and activities relevant to the operations of member boards and the implementation of Council actions. The MBA Committee is composed of a diverse group of members representing a wide range of experience and a wealth of institutional knowledge. The committee consists of nine MBAs representing all four zones, two member board members, an NCEES board of directors liaison, and an NCEES staff liaison. The committee held a face-to-face meeting in November 2019 in Savannah, Georgia.

CHARGES

Charge 1

Mentor new MBAs.

New MBAs face a steep learning curve regarding NCEES activities and operations. The MBA Committee recognizes that each new MBA may be coming into the position with different levels of experience and understanding regarding these activities and operation. Whatever the level of experience, it is imperative to have a formalized onboarding process for new MBAs.

The MBA Committee, with the assistance of NCEES staff, developed a process to introduce new MBAs to NCEES and help them become knowledgeable about NCEES services and processes. The MBA Committee recommends that it have a standing charge to review this process annually. The committee requests for the onboarding process to include, at a minimum, the following:

- Bring new MBAs to NCEES headquarters to conduct a face-to-face orientation.
- Provide new MBAs with a list of NCEES services and a single point of contact at NCEES when seeking assistance.
- Have NCEES notify the MBA Committee as soon as a new MBA is hired, including providing contact information and a bio.
- Develop and maintain materials to present to new MBAs to help make entry into the new position more manageable.

Other recommendations from the MBA Committee regarding improved communication between NCEES and MBAs, whether new or seasoned, are as follows:

- Periodically hold meetings for all MBAs at NCEES headquarters.
- Create a public interface to the Board Profile, and charge the MBA Committee with ensuring that member boards are reminded to update their profiles so that accurate information about each board is displayed.

Charge 2

Coordinate, develop agendas for, and provide leaders for all meetings of the MBAs (annual meeting, Board Presidents' Assembly, MBA meetings, and zone meetings).

Annual meeting

The MBA Committee has worked with NCEES staff to identify professional development of interest to MBAs attending the Wednesday workshops at the 2020 annual meeting. Further, the MBA Forum at the annual meeting will be structured to ensure that critical information is provided and to allow the opportunity for open discussion.

The MBA Committee will lead discussions on formalizing the Resolution of Cooperation (see appendix) and celebrating the NCEES 100th year anniversary.

Combined zone interim meeting

The MBA Committee had planned to present a report and lead discussion on the Resolution of Cooperation at the combined zone interim meeting in April 2020. However, because the zone interim meeting was canceled due to the coronavirus pandemic, the committee will communicate this information at the annual meeting as noted above.

Charge 3

Submit articles for inclusion in Licensure Exchange (six issues per year).

Members of the MBA Committee coordinated with NCEES staff to write articles for *Licensure Exchange*. The following articles were published in the 2019–20 fiscal year:

- October 2019: MBA Committee proposes resolution of cooperation (Kathy Hart)
- December 2019: Refining our recipes for public protection (David Jackson, Esq.)
- February 2020: Outreach efforts strengthen our mission (Molly Mayhew)
- April 2020: MBA Committee develops mentorship plan for new administrators (Heather Richardson)
- June 2020: Emerging technologies shape the future of regulating engineering licensure (Patty Mamola, P.E. and Lance Kinney, Ph.D., P.E.)
- August 2020: Member boards respond to global pandemic (Kathy Hart)

Charge 4

Assist NCEES staff in developing a program of regular MBA video conferences for virtual MBA meetings.

Since the program was created, the following webinars have been presented. They are available online in the members-only section of MyNCEES, under Board Resources/MBA webinar series.

- Webinar 1: CBT PE transition, December 6, 2017
- Webinar 2: NCEES CPC Registry, February 27, 2018
- Webinar 3: Records system updates, April 10, 2018
- Webinar 4: Summary of 2018 annual meeting motions, June 5, 2018
- Webinar 5: The customer side of the E3 system, April 9, 2019
- Webinar 6: Outreach efforts, April 30, 2019
- Webinar 7: Summary of 2019 annual meeting motions, June 5, 2019
- Webinar 8: A webinar to present a summary of 2020 annual meeting motions was planned for June 16, 2020. However, this was canceled because of changes to the annual meeting format. Instead, three webinars are being held leading up to a virtual annual meeting business session on August 27.

These video conferences provide valuable information and have been well received by MBAs as well as member board staff. To continue this successful program, the MBA Committee suggests possible future topics as follows:

- Continue to provide a summary of annual meeting motions presentation before each annual meeting.
- Give information on how to host a webinar.
- Give an overview of resources provided by the Alliance for Responsible Professional Licensing (ARPL).
Note: ARPL hosted a webinar on February 27, 2020, and all MBAs and member board members were invited to attend.
- Provide information on updating Board Profiles.
- Give an overview of navigating Enforcement Exchange.
- Provide an update and overview of NCEES outreach tools; organize an outreach page to assist MBAs.

Charge 5

Work with NCEES staff to develop a communications plan and long-term strategy that would promote actions to increase licensure mobility and reduce barriers to licensure. Develop a timeline for the plan that would culminate during the 100th anniversary of NCEES at the 2020 annual meeting.

The MBA Committee discussed and developed a Resolution of Cooperation between member boards, with the goal of 100 percent participation by member boards for the 2020 annual meeting. This document would be nonbinding and would serve only as guidance for member boards to find ways to reduce barriers to licensure and expedite comity licensure. The proposed Resolution of Cooperation is included in this report's appendix.

There was discussion on how member boards can use the NCEES Model Law Engineer, Model Law Surveyor, and Model Law Structural Engineer designations to eliminate barriers and expedite licensure.

Other discussion

At the Education Committee's request, NCEES Chief Operating Officer Davy McDowell, P.E., discussed with the MBA Committee the pathways to licensure for applicants with degrees from Washington Accord programs. The committee discussed the following barriers:

- An NCEES 2005 memo to member boards related to this issue states, "After conducting research, the Center determined that degrees awarded to many graduates of the Washington Accord programs are not substantially equivalent to a degree from an EAC/ABET-accredited program." Based on this letter, member boards began to eliminate acceptance of Washington Accord degree programs. In light of information about the current processes, the MBA Committee discussed ideas to assist in the elimination of the barrier for applicants with degrees from programs that fall under the Washington Accord. A first step could be for NCEES to write a letter to member boards, possibly in conjunction with ABET, regarding the Washington Accord and how programs become a part of the accord. This would eliminate the reliance upon the 2005 letter and allow for boards to consider accepting Washington Accord degree programs.
- Another challenge is determining whether or not a program is accredited through the Washington Accord. Clarification on this process or some central database is needed to assist MBAs with accepting degree programs from the Washington Accord.

Respectfully submitted, the **Committee on Member Board Administrators:**

Heather Richardson, Chair

Members

Thomas Anderson
John Greenhalge
Kathy Hart
Christine Horne
David Jackson, Esq.
Patty Mamola, P.E.
Kathleen Nosbisch
James Riney P.E., P.S.
Perry Valdez
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Consultant

Lance Kinney, Ph.D., P.E.

Board liaison

Brian Robertson, P.E.

Staff liaison

Stef Goodenow

APPENDIX: DRAFT RESOLUTION OF COOPERATION TO FACILITATE INTERSTATE LICENSURE FOR PROFESSIONAL ENGINEERS AND PROFESSIONAL SURVEYORS

WHEREAS, The National Council of Examiners for Engineering and Surveying (NCEES) is a national organization created by state licensing boards in 1920 to facilitate professional licensing mobility and promote uniformity of the U.S. licensure processes through services for its member licensing boards and licensees; and

WHEREAS, NCEES' members are the engineering and surveying licensure boards from all 50 states, the District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands; and

WHEREAS, The mission of NCEES is to advance licensure for engineers and surveyors in order to safeguard the health, safety, and welfare of the public; and

WHEREAS, The NCEES *Model Law*, *Model Rules*, and *Manual of Policy and Position Statements* are publications adopted by the membership of NCEES; and

WHEREAS, The adopted model licensure concepts within these publications set a common standard for licensure mobility and portability among its member boards to facilitate an efficient, streamlined, expedited administrative procedure and approval process; and

WHEREAS, Alignment of licensure processes and requirements is imperative to facilitate portability of licenses between member boards of NCEES; and

WHEREAS, Increased licensure portability aligns with government initiatives to diversify economies and support economic growth; and

WHEREAS, In the absence of licensure portability efforts, unnecessary barriers to licensure can remain in variable state laws, rules, administrative procedures and approval processes; and

WHEREAS, Unnecessary barriers to licensure, whether perceived or real, could threaten the health, safety, and welfare of the public and may also perpetuate or introduce unnecessary processes that an applicant must undertake, which could become barriers to employment; and

WHEREAS, It is recognized that some member boards may have challenges, such as staffing or obtaining authority to revise statutes and rules, which may impede streamlined processes; and

WHEREAS, NCEES will commemorate 100 years of advancing licensure through the licensing of professional engineers and land surveyors in 2020; therefore, be it

RESOLVED, That the following signatories agree to license a comity applicant that meets nationally recognized standards in the most expeditious manner available within jurisdiction licensing laws, rules, and mission; and furthermore, be it

RESOLVED, That signatory boards are committed to identifying and working to remove unnecessary barriers to licensure portability and mobility which are not in the best interest of the public and not required to fulfill the mission of safeguarding the health, safety, and welfare of the public; and furthermore, be it

RESOLVED, That signatory boards are committed to work towards revising current licensing laws, rules, and policies to allow for more streamlined approval processes for NCEES Model Law Engineer, Model Law Surveyor, and Model Law Structural Engineer applicants and other qualifying applicants; and furthermore, be it

RESOLVED, That signatory boards are committed to minimizing or eliminating unnecessary jurisdiction-specific licensure requirements.

The undersigned hereby certifies that he/she is the duly qualified member board representative to serve as signatory of this non-binding Resolution of Cooperation in recognition of the NCEES 100th anniversary celebration.



Committee on Uniform Procedures and Legislative Guidelines
Lamberto (Bobby) Balli, P.E., Chair

ABSTRACT

The Committee on Uniform Procedures and Legislative Guidelines (UPLG) promotes effective procedures for uniform comity by maintaining the NCEES *Model Law* and *Model Rules*. The committee incorporates revisions to the model language as a result of motions, recommendations, and comments from NCEES committees, task forces, and member boards. The committee conducts a comprehensive review of the *Model Law* and *Model Rules* at least once every five years. It last completed that review in 2017–18.

The 2019–20 UPLG Committee had four charges. It developed three motions for Council action and has several recommendations. The motions begin on page 99.

CHARGES

Charge 1

Review revisions to Model Law 140.20 D, Expirations, Renewals, and Reinstatement to Active Practice, as proposed by the 2018–19 Committee on Member Board Administrators (MBA) and approved by the Council at the 2019 annual meeting. Propose amendments as appropriate.

The 2018–19 Committee on Member Board Administrators presented a motion to charge UPLG with incorporating revisions to *Model Law* 140.20 D. The motion passed, and UPLG received this charge. As a result of its review, UPLG developed Motion 1. A rationale is included with the motion.

Charge 2

Review revisions to Model Rules 240.30 B, Continuing Professional Competency, as proposed by the 2018–19 Committee on Education and approved by the Council at the 2019 annual meeting. Propose amendments as appropriate.

The 2018–19 Committee on Education presented a motion to charge UPLG with incorporating revisions to *Model Rules* 240.30 B. The motion passed, and UPLG received this charge. UPLG developed Motion 2 as a result of its review. A rationale is included with the motion.

Charge 3

Review revisions to Model Rules 240.30 C and E, Continuing Professional Competency, as proposed by the 2018–19 Committee on Education and approved by the Council at the 2019 annual meeting. Propose amendments as appropriate.

The 2018–19 Committee on Education presented a motion to charge UPLG with incorporating revisions to *Model Rules* 240.30 C and E. The motion passed, and UPLG received this charge. UPLG developed Motion 3 as a result of its review. A rationale is included with the motion.

Charge 4

Review NCEES publications, including but not limited to the Model Law, Model Rules, the Manual of Policy and Position Statements, and the website for consistency when referencing the Structural Engineering Examination and Structural Engineering licensure based on recommendations from the Committee on Examinations for Professional Engineers (EPE) 2018–19 report. Propose revisions as appropriate.

UPLG reviewed NCEES publications and did not find inconsistencies with regard to the Structural Engineering exam being considered a Principles and Practice of Engineering (PE) exam. However, it did find inconsistencies with the language. If it is considered to be one of the PE examinations, the committee asked whether the word “Engineering” needs to be included after the word “Structural.” As a comparison, the PE Civil and

PE Mechanical examinations do not include “Engineering” in their titles. However, the UPLG Committee recognizes that the length of the exam is important to recognize since it is a two-day exam. It therefore recommends that all references to examination be phrased as the “PE 16-hour Structural examination” and that the appropriate committee be charged with considering this change in the policy. If the change is made to the policy, the change would then be made accordingly in all other NCEES manuals and on the website.

Respectfully submitted, the **Committee on Uniform Procedures and Legislative Guidelines:**

Lamberto (Bobby) Balli, P.E., Chair

Members

Clifford Baker, P.L.S.
Chimin (Jimmy) Chao, P.E.
Ken Fuller, P.E.
Gale Jamison, P.E.
Wayne Moore, P.E.
Bobbie Shields, P.E.
Shannon Stanfill
Milena Trust, Esq.
Paul Tyrell, P.E., P.L.S.

Board liaison

Timothy Rickborn, P.E.

Staff liaison

Keri Anderson

MOTIONS

UPLG Motion 1

Move that the *Model Law* 140.20 D be amended as follows.

140.20 Expirations, Renewals, and Reinstatement to Active Practice

D. If a licensee is granted inactive status, the licensee may return to active status by notifying the board in advance of this intention, by paying appropriate fees, and by meeting all requirements of the board, including demonstration of continuing professional competency as a condition of reinstatement. In the event that an inactive licensee

1. ~~does~~ Does not maintain a current license in any jurisdiction; and
2. ~~Is not able to demonstrate proof of lawful engineering and/or surveying practice~~

for the ~~three previous five~~ years prior to requesting reinstatement, that individual ~~will~~ may be required to take and pass the NCEES Principles and Practice of Engineering (PE) examination or the NCEES Principles and Practice of Surveying (PS) examination and jurisdiction-specific examinations prior to reinstatement ~~to demonstrate proof of current competency.~~

Rationale

The 2018–19 Committee on Member Board Administrators made a motion to charge UPLG with amending this language. The MBA Committee's rationale was as follows: “The intent of this section is to ensure that qualified individuals are practicing professional engineering and surveying. Most member boards do not require licensees to take an exam again in order to reinstate their license after having a lapsed license for a certain length of time. There are legitimate reasons that an individual may not have maintained a current license, such as working within an industry that did not require him or her to maintain a current license. [These revisions] would allow a member board to use its professional judgment as to whether the specific circumstances of each situation would call for retaking any examination to prove competency.” As part of its recommended changes, the MBA Committee proposed changing the length of time for renewal from three years to five years.

If the motion passes, UPLG recommends that the appropriate committee be charged with considering whether *Model Rules* 240.30, Continuing Professional Competency, section H needs to be modified to address the change from three to five years.

UPLG Motion 2

Move that the *Model Rules* 240.30 B be amended as follows.

240.30 Continuing Professional Competency

B. Definitions

Terms used in this section are defined as follows:

1. Professional Development Hour (PDH)—One contact hour (nominal) of instruction or presentation. The PDH is the common denominator for other units of credit.
 - a. The term “contact hour” is defined as a minimum of 50 minutes of course/activity.
 - b. The total number of hours allowed for a course/activity cannot exceed the actual number of clock hours.

Rationale

The 2018–19 Education Committee proposed a motion to charge UPLG with adding 240.30 B1a and B1b as follows:

240.30 Continuing Professional Competency

B. Definitions

- a. The term “contact hour” will be defined as the amount of time scheduled to allow for instruction in a course (lecture or laboratory) that provides, at a minimum, 50 minutes of interaction between the instructor and the student.
- b. The total number of hours allowed for a continuing education program cannot exceed the actual number of clock hours.

The Education Committee's rationale was as follows: “One of the goals of NCEES is to advance licensure standards for all professional engineers/surveyors. These standards describe the technical and professional competency needed to safeguard the health, safety, and welfare of the public. The Council recognizes that future demands for increasing technical and professional skills have resulted in the need for additional education beyond the bachelor's degree for those entering the engineering/surveying profession. Because of the variety of definitions for a credit hour and without a current definition in the *Model Rules*, the committee is proposing these changes to clarify the definition so that all boards can incorporate into a uniform standard.”

UPLG reviewed the language and modified it in paragraph 1a to simplify it. It also deleted “the amount of time scheduled to allow for instruction in a course (lecture or laboratory)” because it feels that the language is outdated and does not allow for different ways that materials are presented. It changed the original proposed language in 1b for consistency.

UPLG Motion 3

Move that the *Model Rules* 240.30 C and E be amended as follows.

240.30 Continuing Professional Competency

The purpose of the continuing professional competency requirement is to demonstrate a continuing level of competency of licensees.

C. Qualifying Activities

PDHs may be earned as follows:

1. Successful completion of college courses
2. ~~Successful completion of short courses, tutorials, webinars, and distance education courses offered for self-study, independent study, or group study and through synchronous or asynchronous delivery methods such as live, correspondence, archival, or the Internet~~
2. Successful completion of short courses, tutorials, webinars, and distance education courses offered for self-study, independent study, or group study. The method of delivery can be through the following:
 - a. Face-to-face programs or live internet-based programs
 - b. Archived prerecorded programs or archived correspondence programs
3. Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, conferences, or educational institutions
4. Teaching or instructing in 1 through 3 above
5. Authoring published papers, articles, books, or accepted licensing examination items
6. Active participation in professional or technical societies or in accrediting organizations

7. Patents
 8. Active participation in educational outreach activities pertaining to professional licensure or the surveying/engineering professions that involve K–12 or higher education students
- E. Determination of Credit
- The board has final authority with respect to approval of courses, credit, PDH value for courses, and other methods of earning credit.
1. Credit for college or community college approved courses will be based upon course credit established by the college.
 2. Credit for qualifying seminars and workshops will be based on 1 PDH for each hour of attendance. Attendance at qualifying programs presented at professional and/or technical society meetings will earn PDHs for the actual time of each program.
 3. Credit determination for activities in subsections D6 and D8 is the responsibility of the licensee (subject to review as required by the board).
 4. Credit for activity in subsection D7, active participation in professional and technical societies (limited to 2 PDHs per organization), requires that a licensee serve as an officer and/or actively participate in a committee of the organization. PDHs are not earned until the end of each year of service is completed.
 5. No more than 8 PDHs may be obtained during a 24-hour period.

Rationale

The Education Committee's rationale was as follows: "The committee discussed this charge at length and, based on the assortment of courses being offered today, agreed that there needs to be a better definition as to how courses are presented. In addressing the charge, the committee feels that the *Model Rules* needs to spell out the differences between web-based live, web-based pre-recorded, and live face-to-face seminars in the Qualifying Activities section. Because of the increase in the number of courses being offered by a variety of different media, the committee is also proposing that licensees be held to obtaining only 8 PDHs in a 24-hour period."

UPLG is proposing the motion as presented by the Education Committee but recommends that the appropriate committee be charged with the following if this motion passes:

- Review and define the terms "self-study" and "independent study," including a clarification of the difference between the two terms. They are already included in current language but not defined. Consider whether these terms should be defined based on measurable outcomes
- Update the *Continuing Professional Competency Guidelines*, which currently says that self-study is not allowed.
- Add a corresponding definition of record-keeping for self-study. Determine the process for verifying this type of study.



Public Outreach Task Force

Lance Kinney, Ph.D., P.E., Chair

ABSTRACT

The Public Outreach Task Force was charged with developing plans and recommendations for promoting and enhancing outreach activities and messages to the various NCEES and member board audiences. The task force met in Portland, Oregon, on October 17–18, 2019, to discuss and evaluate its charges.

The task force was a continuation of last year's task force and was assigned three charges related to developing plans and recommendations for promoting and enhancing outreach activities and messages to the various NCEES and member board audiences. Last year's task force explored different messages and media aimed at the various engineering and surveying audiences that NCEES and member boards serve: students, new licensees, and seasoned professionals in and outside of licensure. This year, the task force continued that conversation and explored additional actions and recommendations that NCEES and member boards can undertake to expand the NCEES outreach toolbox. The task force discussed all of its charges together, encouraging creative and open conversation and brainstorming, and allowing ideas to flow from one charge to the next.

The task force was made up of engineers, surveyors, member board members, and member board staff—not marketing experts. Therefore, it started the meeting with a marketing and outreach overview and update from NCEES Director of Public Affairs Nina Norris.

Discussion focused on current and future outreach plans that can

- Help NCEES improve and expand its outreach and marketing efforts
- Assist individual boards with expanding their interaction with the public and practitioners
- Provide partnerships between individual boards and NCEES so that a board can use NCEES' expertise and programs in cases where a board has limited resources or experience

CHARGES

Charge 1

Review the actions and recommendations from the 2018–19 Public Outreach Task Force to confirm that outreach activities are progressing as planned.

Last year, the task force proposed an amendment to NCEES Position Statement (PS) 19, Education, which passed as part of the consent agenda. The amendment added K–12 and university education to the NCEES outreach focus. In addition, the task force received an update from NCEES Director of Public Affairs Norris concerning outreach efforts over the past year.

Norris noted that outreach includes not only efforts by NCEES to communicate directly with its audience but also efforts to take the message to other audiences. Therefore, direct interaction and assistance to member boards is key to enhancing NCEES communications. Some activities include sharing the NCEES event calendar—the list of events that NCEES staff will be attending or presenting, such as conferences—with all member boards and then inviting or allowing member boards to partner with NCEES to staff the event or share event space as appropriate. A few member boards have co-branded and assisted with major conferences in their state (such as the Society of Women Engineers and the Society of Petroleum Engineers annual meetings/conferences), and this has been very successful. NCEES is open to helping include member board members and staff for these events, when appropriate, as well as providing booth equipment, promotional items, and training for attendees.

Norris highlighted the NCEES outreach fulfillment system, which is an NCEES online order system through which member boards can order promotional items and materials for their outreach events, at no cost to the member boards. The available items and materials include everything from brochures and pens to T-shirts and banners for conference booths. These materials and the web portal have been available to member boards for a while, but many member boards are not aware of the full range of services and products that they can use.

In the coming year, NCEES staff will work to promote this service to member board staff at events such as the annual meeting; MBA forums; and “push” marketing, which would send examples of available products to member boards so they can see what is available.

The task force discussed the upcoming 100th anniversary of NCEES and the annual meeting celebration in Chicago, Illinois. In addition to promoting services at the annual meeting, NCEES is working on market research studies and revamping the MBA and member board member onboarding materials and resources available through MyNCEES.

The task force discussed the ability to provide outreach training. It noted that while some people are very interested in and energetic about outreach, not everyone has presentation or teaching skills. NCEES may be able to help with speaker training to turn a professional practitioner into a speaker and advocate. NCEES staff is open to assisting member board staff with presentation review and design advice to improve materials.

Charge 2

Develop a communication plan to member boards and the various outreach activities handled by NCEES staff.

The discussion of Charge 2 overlapped to a large extent with Charge 1, as many of the activities from Charge 1 are ongoing. One question asked was, “How can we get the outreach message and materials to MBAs and cover the different needs and experience levels?” The task force brainstormed ideas such as hands-on sessions at zone and annual meetings to let people see what is available. The group discussed training, as noted above, and encouraged NCEES staff to put together presentation training for member board staff and board members/volunteers.

Another way to share the communication plan, materials, and activities with member boards is to reorganize the current information in MyNCEES. Currently, the members-only site has a myriad of information, but it can be somewhat difficult to navigate. A portal or some other method of rolling outreach information into a single, easy-to-use location would be helpful. This could include the outreach calendar mentioned above.

Charge 3

Develop a plan for getting member boards involved in outreach activities within their own jurisdictions.

This section of task force discussion was where new brainstorming ideas surfaced. One of the ideas revolved around webinars. NCEES does them, as do some member boards. They are low cost, relatively easy to deliver, and can reach a wide audience. However, not all member boards have the resources or skills to develop a webinar program. The task force suggested that NCEES put together a webinar-sharing program in which NCEES would act as the main host and allow all member boards to use the program to deliver specific webinars. This would allow jurisdictions with staffing, funding, or training barriers to deliver webinars and training without having to do it all themselves. The task force feels that this would be a very useful tool. NCEES staff is currently implementing this recommendation, and the program will soon be available to all member boards.

Another idea was to provide a forum/storage location for jurisdictions to share their successful outreach materials with each other. There are similar models in use with other professions. For example, teachers share lesson plans and materials. NCEES could set up a centralized place for state-generated presentation materials, pamphlets, designs, and activities to be shared.

Some member boards reported that they have policy or other barriers to implementing an outreach program. The task force feels that last year’s revision to PS 19 was helpful to demonstrate the national support for educational outreach through NCEES. To build on that, the task force also feels that a statement on the importance of outreach as it ties to the mission of public safety specifically would be helpful. The task force is currently working on finalizing such a statement so member boards can better support their outreach programs. It recommends that the appropriate committee/task force be charged with reviewing this language next year and making a motion to include it in the *Manual of Policy and Position Statements* if deemed appropriate.

Several years ago, NCEES created an Emerging Engineers and Surveyors Group consisting of students and new licensees to get their opinions and input on issues such as engineering and surveying education, licensure, and messaging. This group provided insights into an important audience, the engineering and surveying leaders of tomorrow. The task force noted that—while NCEES primarily includes experienced member board members, member board staff, and professional engineers and surveyors—for the most part, NCEES does not include

young or future engineers and surveyors. In trying to discern what messages and media would best communicate and connect with the next generation, the task force determined that asking them directly would be the best route. Therefore, the task force recommends that NCEES develop a similar group on a periodic basis to engage with NCEES and provide input on the changing demographics, messages, policy issues, and other factors facing the next group of engineers and surveyors as they begin their professional careers.

The task force discussed how to better partner with other professional engineering and surveying organizations with regard to outreach. NCEES has a robust program and resources but is not the only group working on outreach related to public safety, licensure, and registration or related to the value of the engineering and surveying professions. If others are doing similar things, it would be good to not overlap messages or audiences or reinvent the wheel, to not send contradictory messages, and to leverage similar programs and resources to amplify messages from various organizations. To that end, the task force discussed methods to work with other societies—such as ASCE, ASME, IEEE–USA, NSPE, and NSPS—to deliver licensure outreach together. The task force also noted that the Participating Organizations Liaison Council (POLC) would be a good venue through which to explore this concept.

As evidenced by the motion developed by the task force and passed by the Council last year, NCEES members recognize K–12 education about engineering and surveying to be a key part of encouraging the engineers and surveyors of the future. To do this, NCEES needs to find a way to implement and support K–12 STEM initiatives. Many organizations are already doing this, including other engineering and surveying societies, DiscoverE, individual educators, and individual school districts. The task force feels that a whole new NCEES program needs to be created, especially since K–12 education has not historically been a primary Council focus. Instead, NCEES could partner with and support other organizations with established outreach programs. As such, the task force recommends that NCEES develop a program, possibly similar to the NCEES Engineering and Surveying Education Awards, that focuses on K–12 education. While it may be desirable to highlight and fund successful programs, the task force feels that those programs are already engaging students and are most likely well-funded. The focus of this new NCEES initiative would be to help seed new outreach programs or existing outreach programs that have barriers to implementation. Therefore, the task force recommends developing a program to fund underserved, underfunded, and other challenged outreach programs in other organizations.

Guest speaker

Director of Public Affairs Norris arranged for a guest speaker—Nate Ball—to speak at the task force meeting to share his knowledge and experience in educating K–12 students about engineering. Ball is a mechanical engineer, entrepreneur, children’s book author, and host of the popular TV show *Design Squad* on PBS. He partnered with NCEES at the 2014 annual meeting outreach event at the Pacific Science Center in Seattle, Washington. He lives in the Portland area and was able to spend part of the day with the task force to share insights and answer questions about engineering outreach. He shared advice on how practicing professionals can effectively present and communicate with K–12 students. This information will be integrated into NCEES outreach materials and training going forward.

Recommendations

Below is a summary of the recommendations for consideration by the Council, member boards, and the board of directors.

- Ask the NCEES board of directors to implement a standing/rotating group of young engineers and surveyors, similar to the Emerging Engineers and Surveyors Group from a few years ago, to provide insight and guidance on communications with engineers and surveyors of the future. Such a group would meet every three years.
- Have NCEES engage with the members of POLC to partner with messaging, funding, and delivery of outreach concerning engineering, surveying, and professional licensure.
- Have NCEES and the board of directors develop a program to support K–12 engineering and surveying education initiatives for underserved, underfunded, or challenged school districts or programs. An example would be \$100,000 to be funded over a three-year pilot program.

Respectfully submitted, the **Public Outreach Task Force:**

Lance Kinney, Ph.D., P.E., Chair

Members

Alireza Asgari, Ph.D., P.E., S.E.

Kathy Hart

Christina Martin, P.L.S.

Karen Purcell, P.E.

Zana Raybon

Candie Robinson

Samuel Wilson, P.E.

Board liaison

James Purcell, P.E.

Staff liaison

Nina Norris



From: [NCEES](#)
To: [Powers, Rebecca J \(CED\)](#)
Subject: NCEES moves computer-based testing transition of PE Civil exam to 2022
Date: Thursday, September 24, 2020 10:27:09 AM



Dear Member Board Administrators,

The Principles and Practice of Engineering (PE) Civil exam is moving to computer-based testing (CBT), with appointments available year-round at Pearson VUE test centers beginning April 1, 2022. The exam will be offered for the last time in pencil-and-paper format in October 2021. Registration for the April 2022 CBT exam will open November 1, 2021.

NCEES originally planned to complete the PE Civil exam's transition to CBT format in 2023 but fast-tracked the change as part of its response to COVID-19. After the April 2020 pencil-and-paper exam administration was canceled because of the coronavirus pandemic, NCEES added an extra day to the October 2020 administration and began exploring the possibility of moving the PE Civil exam to CBT earlier than planned.

"Under the current COVID-19 guidelines, fewer examinees can be in the exam room at the same time, so we began discussions with Pearson VUE about transitioning the PE Civil exam from 2023 to an earlier date," explained NCEES Chief Officer of Examinations Tim Miller, P.E. "This new format will give examinees more flexibility about when and where they take the exam."

For more information on the PE Civil exam and the transition of NCEES licensing exams to CBT format, visit [ncees.org/cbt](https://www.ncees.org/cbt).

Sincerely,
NCEES

[Unsubscribe](#) from future NCEES correspondence.

From: [Lea Strickland](#)
To: [Powers, Rebecca J \(CED\)](#)
Subject: FW: When you have time..
Date: Friday, November 6, 2020 10:29:49 AM

Rebecca, I got an answer today – it's not great, but at least it's not without hope...see below.

Lea Strickland
Exam Administration Services

NCEES

T: 800-250-3196
ncees.org

From: Bob Whorton <bwhorton@ncees.org>
Sent: Friday, November 6, 2020 1:10 PM
To: Lea Strickland <lstrickland@ncees.org>
Cc: Davy McDowell <dmcdowell@ncees.org>
Subject: RE: When you have time..

Lea,

Pearson VUE advised that the test center at the University of Alaska Fairbanks was contacted to determine their willingness to offer NCEES PE and PS exams. That test center declined due to COVID-19 concerns. Pearson VUE has asked that test center for a clarification about their willingness post COVID-19. NCEES is awaiting for an update from Pearson VUE concerning that request.

Bob

Bob Whorton, P.E.
Manager of Compliance and Security

NCEES

T: 800-250-3196 x-5467
ncees.org

From: Lea Strickland <lstrickland@ncees.org>
Sent: Friday, November 6, 2020 7:45 AM
To: Bob Whorton <bwhorton@ncees.org>
Subject: FW: When you have time..

See below.

Lea Strickland
Exam Administration Services

NCEES

T: 800-250-3196

ncees.org

From: Davy McDowell <dmcdowell@ncees.org>
Sent: Friday, November 6, 2020 7:44 AM
To: Lea Strickland <lstrickland@ncees.org>; David Cox <dcox@ncees.org>
Subject: RE: When you have time..

Bob W. has been working with Pearson on this. I don't remember seeing a resolution but ask Bob, he may have more information.

Davy

From: Lea Strickland <lstrickland@ncees.org>
Sent: Friday, November 6, 2020 7:43 AM
To: Davy McDowell <dmcdowell@ncees.org>; David Cox <dcox@ncees.org>
Subject: FW: When you have time..

See below, about UAF in Alaska offering the PE CBT exams.

I told her we have visitors today, and it will likely be next week before you respond.

Lea Strickland
Exam Administration Services

NCEES
T: 800-250-3196
ncees.org

From: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Sent: Thursday, November 5, 2020 5:29 PM
To: Lea Strickland <lstrickland@ncees.org>
Cc: Board of AELS (CED sponsored) <aelsboard@alaska.gov>
Subject: RE: When you have time..

Hi Lea,

I am preparing for our board meeting next week and am wondering if there was ever a response received from UAF? Please see the section highlighted below.

Thank you,

Rebecca Powers

Executive Administrator
Alaska State Board of Registration for
Architects, Engineers, and Land Surveyors
f 907.465.2974 www.professionallicense.alaska.gov

From: Lea Strickland [<mailto:lstrickland@ncees.org>]
Sent: Thursday, August 20, 2020 8:08 AM
To: Neal, Sara J (CED) <sara.neal@alaska.gov>
Cc: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: RE: When you have time..

Okay, they actually responded to me directly, and shared this info:

FE and FS examinations are offered at Pearson Professional Centers (PPC's) across the United States and Canada. There are a few other international locations but those are only for examinees in those locations / countries. (The one exception might be military candidates.) The FE and FS examinations are also offered at Pearson VUE Test Center Selects. These test centers are located typically at a university. The PVTC Selects have upgraded to a 24 inch monitor and have the necessary security features. Some examples are Texas A&M, Clemson University, Auburn University, Purdue University, University of Alaska – Fairbanks, etc. I think there is 20 to 25 of those around the country.

PS and PE examinations are offered at PPC's only with a few exceptions. The reason for this is because of the references needed for the PE examination. With some of the PE examinations, the CBT exam will feature a media deployment that requires the test center to do something different. Since the PPC's are Pearson owned – they make the push of references to the test center automatically. This is not true of the Select centers so the decision was made to limit the number of the PVTC Selects that can offer the PE exams. NCEES can request a PVTC Select to offer the PE or PS examination but it is up to the center to make the decision whether to offer it or not. One big issue is appointment time. The 9.5 hour appointment time for the PE is sometimes out the normal working hours of the test center and thus they may select not to offer it.

So, as you can see, there is a difference in the type of test centers Pearson VUE has, and that affects whether we offer our exams there.

Our management and PV did reach out to UAF last month to ask if they would/could offer the professional exams (they do already offer the FE and FS exams). I don't know that they have responded yet, but I think you would have to talk with university leadership to convince them to offer the professional exams, seeing as how Anchorage is the only location in the state otherwise, and not always easy for people to get to – logistically and financially. On UAF's side, it would entail having enough staff and time to dedicate to making sure the center is available for the longer professional exams, and of course if there were costs associated with that, either for staff time or to PV.

UA in Juneau doesn't offer any of the exams. I don't think that will change, and unfortunately, they

have a very very low examinee volume anyway, so it is unlikely they would make a lot of arrangements for only ~10 people a year.

As for financial costs for examinees (i.e. travel and lodging to go to Anchorage to test), could your state's engineering society help with qualifying examinees? Could you add a nominal fee to applications or renewals or something that could start a fund to assist with travel costs for qualifying examinees? Just trying to think outside the box....

Lea Strickland
Exam Administration Services

NCEES

T: 800-250-3196
ncees.org

From: Neal, Sara J (CED) <sara.neal@alaska.gov>
Sent: Wednesday, August 19, 2020 2:09 PM
To: Lea Strickland <lstrickland@ncees.org>
Cc: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: RE: When you have time..

Thank you, Lea.

We will look forward to their response.

Sara

From: Lea Strickland [<mailto:lstrickland@ncees.org>]
Sent: Wednesday, August 19, 2020 10:07 AM
To: Neal, Sara J (CED) <sara.neal@alaska.gov>
Cc: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: RE: When you have time..

I have sent your message to senior management and they will be back in touch – not sure how to go about doing that with Pearson VUE!

Lea Strickland
Exam Administration Services

NCEES

T: 800-250-3196
ncees.org

From: Neal, Sara J (CED) <sara.neal@alaska.gov>
Sent: Wednesday, August 19, 2020 2:00 PM
To: Lea Strickland <lstrickland@ncees.org>

Cc: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>

Subject: RE: When you have time..

Hi Lea-

Thank you for this –

And unfortunately, there is no longer a Pearson Location in Fairbanks so the only place available for Alaska CBT examinees to go to take an exam is Anchorage. That center only has 8 seats for testing. How do we go about advocating for more CBT exam centers in Alaska?

I appreciate your help,

Sara Neal

Licensing Examiner

[Board of Registration for
Architects, Engineers and Land Surveyors](#)

P (907)465-2540 F (907)465-2974
aelsboard@alaska.gov

From: Lea Strickland [<mailto:lstrickland@ncees.org>]

Sent: Wednesday, August 19, 2020 9:52 AM

To: Neal, Sara J (CED) <sara.neal@alaska.gov>

Cc: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>

Subject: RE: When you have time..

Testing locations in Alaska

PE Civil – Pencil and Paper Exams: All paper exams, including the SE 16 hour exam, are offered in Anchorage, Fairbanks, and Juneau.

SE 16 hour – Paper exam; see above

CBT Exams – You can find the list of nearby sites to a specific address here:

<https://wsr.pearsonvue.com/testtaker/registration/SelectTestCenterProximity/NCEES?>

However, it looks like the Pearson VUE test centers available for the CBT exams are only in Anchorage and Fairbanks.

Please let me know what else you need!

Lea Strickland
Exam Administration Services
NCEES
T: 800-250-3196
ncees.org

Continuing Education Report:

Architects, Engineers, Land Surveyors, & Landscape Architects

Biennial Renewal Period Ending December 31, 2019

24 PDHs required for renewal. Up to 12 PDHs may be carried forward to the next biennial renewal period.

PART I: CE Credit Summary

Registrant Name:	Registration #:
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Description of CE Activity	PDHs Units
A. Successful completion of college courses.	1 semester hour - 45 PDHs 1 quarter hour – 30 PDHs
B. Successful completion of acceptable courses which are awarded Continuing Education Units (CEU)*	10 PDHs per CEU
C. Successful completion of short courses, tutorials, correspondence courses, web-based courses, and televised or videotaped courses.	1 PDH per hour of attendance
D. Presenting or attending seminars, in-house workshops or professional or technical presentations made at meetings, conventions or conferences.	1 PDH per hour of attendance
E. Initial instruction of the subject matter when teaching professional development courses, seminars, or professional or technical presentations. (Does not apply to full-time faculty.)	2 PDHs per hour of instruction
F. Published papers, articles, or books.	10 PDHs per biennial registration period. Amount of credit depends on amount of time and effort required for the paper, article, or book.
G. Participation in professional and technical societies.	Up to 8 PDHs per year as an officer or participating committee member per professional or technical society based on one PDH for each two hours of service or participation. Credits are earned at the end of each full year of service or participation.

**A Continuing Education Unit (CEU) is a nationally recognized method of quantifying the time spent in the classroom during professional development and training activities. Ten hours of instruction = 1 CEU.*

I qualify for an exemption from the continuing education requirement based on:

- ☐ New registrant/first renewal period
- ☐ 120 consecutive days on active duty in the United States armed forces (*documentation required*)
- ☐ Retired status
- ☐ Other (requires a letter of explanation and may require additional documentation)

Continuing Education Report: Architects, Engineers, Land Surveyors, & Landscape Architects

Biennial Renewal Period Ending December 31, 2019

PART II: Certification

All activities must be relevant to the practice of architecture, engineering, land surveying, or landscape architecture and relevant to promoting the public health, safety, and welfare within Alaska. The activities may include technical, ethical, or managerial content. This form may be duplicated if necessary. **Documentation is required.**

Registrant Name:		Registration #:	
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Date of Activity	Course Title/Description	Course Provider Address <i>City, State</i>	Instructor	Area <i>Specify: Ethics, Technical, Business Practice, or Laws & Regulations</i>	Class Type <i>Specify: Face to Face or Online</i>	PDHs Earned

Total PDHs Earned:	
PDHs Being Carried Forward:	

12 AAC 02.960. AUDIT OF COMPLIANCE WITH CONTINUING COMPETENCY REQUIREMENTS. (a) Except as provided in (b) - (j) of this section, the department will audit compliance of licenses with continuing competency requirements in accordance with this section if

- (1) the licensee is required to meet continuing competency requirements under AS 08 or this title;
- (2) *repealed 9/29/2005*;
- (3) *repealed 9/29/2005*.

(b) A licensee subject to audit under (a) of this section and applying for license renewal shall (1) complete and sign a statement of compliance with continuing competency requirements; and
(2) submit the statement to the department with the application for license renewal.

(c) Except as provided in (d) of this section, the department will select licensees for audit under (a) of this section as follows: (1) ten percent of the total number of licensees in that profession if the total number of licensees is less than 3,000; or
(2) five percent of the total number of licensees in that profession if the total number of licensees is 3,000 or more.

(d) The department will require that a different percent of licensees be selected for audit, if the board that regulates the profession, or the department for a profession not regulated by a board or commission, finds that a different percent to be audited is necessary to protect public health and safety.

(e) A licensee selected for audit under (c) or (d) of this section will be notified by the department. Within 30 days of notification, the licensee shall submit to the department, documentation to verify completion of the continuing competency activities claimed on the statement submitted with the application for license renewal. The documentation must include a valid copy of a certificate or similar verification of satisfactory completion of the continuing competency activities claimed that provides

- (1) the name of the licensee;
- (2) the amount of continuing competency credit awarded;
- (3) a description of the continuing competency activity;
- (4) the dates of actual participation or successful completion; and
- (5) the name, mailing address and signature of the instructor, sponsor, or other verifier.

(f) A licensee subject to audit under (a) of this section is responsible for maintaining adequate and detailed records of all continuing competency activities completed and shall make the records available to the department on request. A licensee shall maintain the records until the later of

- (1) four years from the date of completion of the continuing competency activity; or
- (2) if the licensee was selected for audit, the date that the department notifies the licensee that the audit is completed.

(g) The department will extend the period for providing documentation of completion of continuing competency activities if the department finds that the licensee has good cause for the need for additional time to submit the documentation required in (e) of this section.

(h) The department will notify the respective board of a licensee's failure to comply with the department's request for records under (e) of this section.

(i) For professions licensed by the department, the department will consider the licensee's failure to comply with the department's request for records under (e) of this section as grounds for imposition of disciplinary sanctions to the extent allowed under AS 08 and this title.

(j) In this section, "successful completion" means the date that credit for the continuing competency activity is awarded by the instructor, sponsor, or other verifier for completion of the activity.

12 AAC 02.965. FAILURE TO MEET CONTINUING EDUCATION REQUIREMENTS FOR

RENEWAL AND REINSTATEMENT OF LICENSE. (a) Except as otherwise provided in AS 08 or this title, a license issued under AS 08 will not be renewed or reinstated if the applicant for renewal or reinstatement has not earned the required number of continuing education credits. The applicant may earn the required number of credits after the expiration date of the license. Continuing education credits earned to reinstate or renew an expired license may not be used to satisfy the continuing education requirements for a future renewal or reinstatement. Credits submitted to satisfy the continuing education requirements under this section must be approved under AS 08 and this title by the department or the applicable board.

(b) For the purposes of this section, "continuing education credits" includes continuing competency, contact hours, continuing education units (CEUs), and credit hours.

CPC Tracking » Add Course

Date (mm/dd/yyyy)

Course Title

Course Provider

Instructor

Area

Hours

Class Type

City

State

Description / Learning Objectives

Continue

Area

✓ -- Area --

Ethics
Technical
Business Practice
Laws and Regulations

Class Type

✓ -- Class Type --

Face to Face
Online

CPC Tracking » Woodwinds and Microwaves | 02/07/2020

✕ Remove

✎ Edit

Woodwinds and Microwaves

Date	02/07/2020
Provider	Institute of Electrical and Electronics Engineers USA (IEEE)
Instructor	Charlie Jackson, PHD
Area	Technical
Hours	1.00
Class Type	Face to Face
City	Los Angeles
State	California
Created	02/12/2020

Description

WOODWINDS AND MICROWAVES

This talk describes how to use two key ingredients of microwave circuit design theory to design woodwind musical instruments; especially renaissance instruments such as the flute, crumhorn, or cornetto. The two main ingredients are transmission line theory, and a philosophy for modeling a physical system. Renaissance musical instruments are described, similarities between acoustical and microwave transmission lines are explained, and the design, fabrication, and test of a crumhorn is described. 3D printing has been used to manufacture the instruments.

Documents/Certificates

+ Add Document

Upload Date	File	Comment
🕒 No documents found		

What are the definition of PDH, LU and CEU?

Professional Development Hour (PDH) is defined as one contact hour of instruction, presentation or study. The term PDH is commonly used in the engineering community. The maximum PDH for a seminar that starts at 8 a.m. and ends at 5 p.m. with an hour lunch is eight (8). Short breaks are permissible as long as a minimum of 50 minutes of presentation/participation/study per hour is undertaken. If there are no breaks, or there are breaks of less than 10 minutes per hour, no additional time may be claimed. PDH cannot exceed the actual contact clock hours. Round off PDH to the nearest half hour. No activity under a half hour will be accepted for credit. For example, a qualifying activity of 30 to 49 minutes would be reported as 0.5 PDH and an activity of 50 to 70 minutes would be reported as 1.0 PDH. PDH is sometimes called PDU (**Professional Development Unit**).

Learning Unit (LU) is used by American Institute of Architects 's Continuing Education Systems (AIA/CES) and is based on a 60-minute hour. Time beyond 60 minutes is recorded in quarter hour increments (e.g., 1 hour 45 minutes = 1.75 LUs). Credit should be stated as an AIA/CES Learning Unit hour (AIA/CES LU). In order for programs to qualify for Health , Safety and Welfare (HSW) credit, providers must demonstrate that 75% of the content specifically addresses one or more HSW-related issues. Programs that qualify for HSW credit are identified as "AIA/CES Learning Unit (HSW)" or "AIA/CES LU (HSW)."

Continuing Education Unit (CEU) is a nationally recognized and uniform unit of measure for continuing education and training. One CEU is awarded for each 10 contact hours of instruction or study. When a sponsor of PDH activities fully follows the requirements of the International Association for Continuing Education and Training (IACET) in awarding CEU's, 10 PDHs will be credited for 1 CEU. However, one should be aware that some organizations may advertise CEU credit without having met the requirements of the IACET. In addition, some organizations report one CEU of credit for each contact hour of instruction, which is equivalent to one PDH only.

How do I convert CEU to PDH or LU?

1.0 CEU (Continuing Education Unit) = 10 PDH's or 10 LU's.

1.0 PDH (Professional Development Hour) = 1.0 Clock Hour (minimum 50 minutes).

1.0 LU (Learning Unit) for architects = 1.0 PDH for engineers.

What kinds of activities are qualified as PDH activities?

Determination of qualifying activities must be made by the licensee in the states that do not pre-approve courses or activities. With the broad range of opportunities to earn PDH, it is up to the licensee to determine whether the activity qualifies under the Board's requirements. The following activities are

usually acceptable to the state boards:

- Completing online courses or correspondence courses on topics related to licensee's professional practice (a test is required at the end of the course).
- Completing or attending seminars, in-house training programs which relates to the licensee's professional practice.
- Attending technical or professional society meetings when a topic related to the licensee's professional practice is presented as a principal part of the program.
- Teaching a course for the first time or if substantial time has been spent in updating material if previously taught.
- Completing management or ethical courses which relate to the improvement of one's business or profession.

For additional information on typical qualifying and non-qualifying PDH activities, please study "[NCEES: Continuing Professional Competency Guidelines](#)".

From: [Powers, Rebecca J \(CED\)](#)
To: [Neal, Sara J \(CED\)](#)
Subject: FW: Continuing Education Transcript Questions
Date: Wednesday, June 24, 2020 9:29:00 AM
Attachments: [AIA CE Standards FINAL v1.pdf](#)

From: CES Support [mailto:cessupport@aia.org]
Sent: Wednesday, June 24, 2020 9:25 AM
To: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: Re: Continuing Education Transcript Questions

Ms. Powers,

Thank you for reaching out with your questions. I am happy to provide answers to your questions and any additional clarification you may need.

- Are all courses on the transcript taken through AIA, or do members record their CEs from other organizations/institutions using your tracking database?

All courses listed are through approved AIA CES providers. We manage a network of more than 3,200 providers that include AIA National and AIA Chapters, but also includes associations, building product manufacturers, colleges and universities, government agencies, and others. We do allow members to self-report courses taken outside the AIA network. Those are noted with "Self-Report" under the "Provider" column.

- If CEs are taken through outside organizations/institutions, are members required to upload a copy of their certificates or course descriptions?

Our CE Providers report attendance to us directly on behalf of members. All courses have been pre-approved by AIA CES prior to them being eligible for AIA continuing education credit. I have attached a copy of our standards which all providers must meet.

- If CEs are taken through outside organizations/institutions, does AIA vet CE submissions to make sure they benefit public health, safety, and welfare?

Yes! All courses are reviewed and approved for AIA CE credit and HSW credit prior to being delivered. Again, please reference the attached standards.

- If members upload certificates or course descriptions, are they able to create a report that includes the transcript and certificates?

Members do not upload certificates to us. Most states accept the AIA CE transcript as a record of continuing education because we have a robust system for pre-approving courses and relying on providers to report attendance versus members submitting their own records.

I am happy to answer any additional questions you may have to provide the clarification needed. You can reach me directly at stephenmartin@aia.org.

Stephen Martin
Managing Director, Professional Development & Resources

The American Institute of Architects

1735 New York Avenue NW | Washington, DC 20006

On Wed, 24 Jun at 12:56 PM , Powers, Rebecca J (CED) <rebecca.powers@alaska.gov> wrote:

Good Morning,

I'm the executive administrator for the Alaska State Board of Registration for Architects, Engineers, and Land Surveyors. We are just starting to audit our licensees for the 2018-2019 licensing period and I have a few questions about the Continuing Education Transcript from AIA.

We received one from a licensee today, which I have attached for reference.

My questions are:

- Are all courses on the transcript taken through AIA, or do members record their CEs from other organizations/institutions using your tracking database?
- If CEs are taken through outside organizations/institutions, are members required to upload a copy of their certificates or course descriptions?
- If CEs are taken through outside organizations/institutions, does AIA vet CE submissions to make sure they benefit public health, safety, and welfare?
- If members upload certificates or course descriptions, are they able to create a report that includes the transcript and certificates?

Any information you can provide will be helpful. If this email should be directed to someone in particular, please let me know.

Thank you,

Rebecca Powers

Executive Administrator

Alaska State Board of Registration for

Architects, Engineers, and Land Surveyors

f 907.465.2974 www.professionallicense.alaska.gov

For information about Alaska's response to COVID-19, please visit coronavirus.alaska.gov.

From: [Powers, Rebecca J \(CED\)](#)
To: [Neal, Sara J \(CED\)](#)
Subject: FW: Continuing Education
Date: Wednesday, June 24, 2020 10:28:00 AM

From: Tracy Snyder [mailto:tsnyder@ncees.org]
Sent: Wednesday, June 24, 2020 10:14 AM
To: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: RE: Continuing Education

Hi Rebecca,

Thank you for your email. I'm glad it's easy to read.

Here is some information about CPC tracking through NCEES accounts:
<https://ncees.org/cpc/>.

NCEES only provides a way for our customers to conveniently track and report CPC requirements to state boards for free through their account.

There aren't any courses here at NCEES. Our customers just input the information our outside sources into our tracking system for each course. There is a place for them to upload a certificate if needed.

If a course provider is not listing in the dropdown, there is an "other" option that they can choose to manually type in the course provider needed.

Please let me know if you have any questions.

Sincerely,

Tracy Snyder
Manager of Client and Exam Administration Services

NCEES
T: 800-250-3196
www.ncees.org

From: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Sent: Wednesday, June 24, 2020 1:26 PM
To: Tracy Snyder <tsnyder@ncees.org>
Subject: RE: Continuing Education

Hi Tracy,

We just sent audit notifications to licensees for the 2018-2019 licensing period and we are accepting CPC Transcripts as documentation. We've received one so far and we LOVE it – so easy to read!

I'm new to this position so I do have a few questions about how NCEES administers/records CEs.

- Are all courses on the CPC Report taken through NCEES, or do members record their CEs from other organizations/institutions using your tracking database?
- If CEs are taken through outside organizations/institutions, are members required to upload a copy of their certificates or course descriptions?
- If CEs are taken through outside organizations/institutions, does NCEES vet CE submissions to make sure they benefit public health, safety, and welfare?

Any information you can provide will be helpful.

Thank you,

Rebecca Powers

Executive Administrator
Alaska State Board of Registration for
Architects, Engineers, and Land Surveyors
f 907.465.2974 www.professionallicense.alaska.gov

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From: Tracy Snyder [<mailto:tsnyder@ncees.org>]
Sent: Wednesday, June 24, 2020 8:55 AM
To: Lea Strickland <lstrickland@ncees.org>
Cc: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: RE: Continuing Education

Hi Rebecca,

How can I help you?

Sincerely,

Tracy Snyder
Manager of Client and Exam Administration Services

NCEES
T: 800-250-3196
www.ncees.org

From: Lea Strickland <lstrickland@ncees.org>
Sent: Wednesday, June 24, 2020 12:20 PM
To: Tracy Snyder <tsnyder@ncees.org>
Cc: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Subject: FW: Continuing Education

Hi Tracy, can you help Rebecca with her questions, or put her in touch with someone who can?

Lea Strickland
Exam Administration Services

NCEES
ncees.org

From: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Sent: Wednesday, June 24, 2020 12:19 PM
To: Lea Strickland <lstrickland@ncees.org>
Subject: Continuing Education

Hi Lea,

Who would I contact if I have questions about CPC Reports?

Thanks!

Rebecca Powers
Executive Administrator
Alaska State Board of Registration for
Architects, Engineers, and Land Surveyors
f 907.465.2974 www.professionallicense.alaska.gov

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From: [Weigand, Megyn A \(LAW\)](#)
To: [Powers, Rebecca J \(CED\)](#)
Subject: Fw: Request for Legal Review - Rimkus/Alaska's Amendment Response
Date: Thursday, September 24, 2020 8:43:10 PM
Attachments: [Articles of Incorporation with Amendment.pdf](#)
[Alaska Amendment COA Application Sent VIA USPS 5.21.20 sent with Corporate byLaws.pdf](#)
[Bris Updated Application.pdf](#)
[Bris Emails.pdf](#)
[Stephens.pdf](#)

Hi Rebecca,

Thanks for sending along all the information, each application is a bit different so this way I can address all of them. Happily, it comes down to just a few simple answers. First, the part of the COA form on page 2 under C.1. which requests a certified copy of field-specific amendments to a business entity's bylaws/articles of incorporation/partnership agreement is not supported by the Board's statutes or regulations. While not every detail of a form must be specifically prescribed by statute or regulation, the problem here is that the form is actually at odds with the statute and regulation.

AS 08.48.241(b)(1) requires only that the bylaws of the corporation, the articles of organization or operating agreement of the limited liability company, or the partnership agreement of the limited liability partnership **contain provisions that all architectural, engineering, land surveying, or landscape architectural decisions pertaining to architectural, engineering, land surveying, or landscape architectural activities in this state will be made by the specified architect, engineer, land surveyor, or landscape architect in responsible charge, or other registered architects, engineers, land surveyors, or landscape architects under the direction or supervision of the architect, engineer, land surveyor, or landscape architect in responsible charge.**

And 12 AAC 36.135(4) only requires a copy of the bylaws of the corporation, the articles of incorporation or operating agreement of the limited liability company, or the partnership agreement of the limited liability partnership showing that the corporation, limited liability company, or limited liability partnership has complied with the requirements in AS 08.48.241(b)(1).

Under AS 08.48.241(a)(1), the Board can adopt a form that asks for information necessary to enable the board to determine whether the entity is qualified in accordance with AS 08.48 to provide licensed professional services. An entity's bylaws/articles/agreement must have provisions like that in AS 08.48.241(b)(1) because it is statutorily required, but beyond that, requiring an amendment to the bylaws/articles/agreement for field-specific updates like the current form requires, isn't necessary to a determination of whether an entity is qualified to provide licensed professional services.

Turning to Rimkus' articles of incorporation (I'm assuming they didn't provide any bylaws), these documents do not include provisions like that required in AS 08.48.241(b)(1). Because

the requirement that an entity's bylaws/articles/agreement must include a provision like that in (b)(1) is statutory, the Board cannot waive it. The Alaska legislature would have to amend the statute.

Do you have a copy of Bris's articles of incorporation? Do they contain provisions like that in AS 08.48.241(b)(1)? If the language in their current bylaws limits the statutorily required provision only to decisions on "civil" engineering activities, then the Board would be on firmer ground to ask them to amend the bylaws. But if the current bylaws contain a provision under which all decisions pertaining to activities in this state will be made by the person who has responsible charge (or the person who is under the direction or supervision of the person who has responsible charge) then it satisfies the statute and the regulation. Such an entity would not need a variance from the Board's regulation. First, because there is no process to recognize something like a variance. Second, because assuming the bylaws contain provisions like that in AS 08.48.241(b)(1) and the entity has provided all other required documentation, they have met the requirements of the statute and regulation.

Finally, as far as the latest request from Stephens Engineering Consultants, Inc., this corporation has said that it has no bylaws. That's a problem. The corporation is going to need to provide bylaws that at least contain provisions "that all architectural, engineering, land surveying, or landscape architectural decisions pertaining to architectural, engineering, land surveying, or landscape architectural activities in this state will be made by the specified architect, engineer, land surveyor, or landscape architect in responsible charge, or other registered architects, engineers, land surveyors, or landscape architects under the direction or supervision of the architect, engineer, land surveyor, or landscape architect in responsible charge." The corporation may come back and say that bylaws are not required in Texas where the company is incorporated. But Texas doesn't prohibit the adoption of bylaws, and Alaska where they wish to perform professional services requires the submission of bylaws.

Short term, I recommend the following update to the COA form:

C.1. **Certified copy of the current corporate, LLC, or LLP bylaws, articles of organization, or operating agreement which complies with the requirements in AS 08.48.241(b)(1).**

I hope this helps, I would be happy to discuss this advice further if you would like.

Cheers,
Megyn Weigand

From: Cain, Rebecca (LAW) <rebecca.cain@alaska.gov>

Sent: Tuesday, September 22, 2020 4:32 PM

To: Weigand, Megyn A (LAW) <megyn.weigand@alaska.gov>

Subject: FW: Request for Legal Review - Rimkus/Alaska's Amendment Response

Hi Megyn,
Can you assist the Board of Architects, Engineers and Land Surveyor's with this question?
Let me know.
Thank you,
Rebecca

From: Walsh, Sharon J (CED)
Sent: Tuesday, September 22, 2020 4:09 PM
To: Cain, Rebecca (LAW) <rebecca.cain@alaska.gov>
Subject: FW: Request for Legal Review - Rimkus/Alaska's Amendment Response
Importance: High

Hi Rebecca,
Did I ask you for assistance on this matter? I'm not recalling, but if I did not, we will need some guidance for the Architects, Engineers and Land Surveyor's board. If you could ask that the assigned AAG contact Rebecca Powers the Executive Administrator that would be appreciated.
Thank you.
Sharon

Sharon J. Walsh
Deputy Director
Division of Corporations, Business and Professional Licensing
Department of Commerce, Community, and Economic Development
907.269.3037
Sharon.walsh@alaska.gov

From: Powers, Rebecca J (CED) <rebecca.powers@alaska.gov>
Sent: Tuesday, September 22, 2020 2:37 PM
To: Walsh, Sharon J (CED) <sharon.walsh@alaska.gov>
Subject: FW: Request for Legal Review - Rimkus/Alaska's Amendment Response

Hi Sharon,

When you get a chance, do you mind checking with legal to see where they are on this opinion?

Thanks so much,

Rebecca Powers
Executive Administrator
Alaska State Board of Registration for
Architects, Engineers, and Land Surveyors
f 907.465.2974 www.professionallicense.alaska.gov

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From: Board of AELS (CED sponsored)
Sent: Tuesday, August 11, 2020 12:57 PM
To: Walsh, Sharon J (CED) <sharon.walsh@alaska.gov>
Subject: Request for Legal Review - Rimkus/Alaska's Amendment Response

Hi Sharon,

The AELS board chair has reviewed the questions presented to us from one of our licensee's attorney and would like an opinion from the AGs office.

Thank you,

Rebecca Powers

Executive Administrator
Alaska State Board of Registration for
Architects, Engineers, and Land Surveyors
f 907.465.2974 www.professionallicense.alaska.gov

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From: John B. Kerr [<mailto:John.Kerr@survbase.com>]
Sent: Tuesday, August 11, 2020 12:07 PM
To: Board of AELS (CED sponsored) <aelsboard@alaska.gov>
Cc: Neal, Sara J (CED) <sara.neal@alaska.gov>
Subject: RE: Rimkus/Alaska's Amendment Response

If I'm reading this correctly, Rimkus' attorney wants a variance from our regs. IF that is correct then: This is a legal matter related to corporate structure and outside the AELS Board's area of expertise. Please forward to the AGs office (our only legal counsel) to evaluate if this meets the law and if not, what needs to happen.

1. We need to know if Rimkus complying with our Certificate of Authorization (COA) requirements (AS 08.48.241, 12 AAC 36.135)?
 - a. If not, is Rimkus functionally meeting the objectives of our requirements?
 - i. If Rimkus is functionally meeting the objectives (but not the technical requirements, does the AG believe that it is in the best interest of the State to consider changes to our regulations to accommodate their approach?

Also, their resolution says:

RESOLVED, that XX, Registration No. ##, is hereby designated as the person responsible for the practice of *XDisciplineX* by Rimkus Consulting Group, Inc. in the State of Alaska; and has full authority to make all final decisions with respect to

XDisciplineX

work performed by the Corporation in the State of Alaska.

2. We need to know if using the phrase “in the State of Alaska.” is a way to get out of compliance for work performed elsewhere for projects occurring in Alaska?
3. If they are not complying and the AG recommends denying their application for a COA, we need the AG’s office to prepare a draft response to Rimkus telling them what they need to do to receive a COA in AK.

John Kerr, PLS
[www.SurvBase](http://www.SurvBase.com), LLC
c. 907.529.5959

From: Board of AELS (CED sponsored) <aelsboard@alaska.gov>
Sent: Tuesday, August 11, 2020 11:30 AM
To: John B. Kerr <John.Kerr@survbase.com>
Cc: Neal, Sara J (CED) <sara.neal@alaska.gov>
Subject: FW: Rimkus/Alaska's Amendment Response

Hi John,

We just received better documentation for the Rimkus item that was previously under the Statute and Regulation section. Should it go back there, or do you want it under Correspondence?

Thanks,
Rebecca

From: David Ward [<mailto:ward@dwardlaw.com>]
Sent: Tuesday, August 11, 2020 11:23 AM
To: Board of AELS (CED sponsored) <aelsboard@alaska.gov>
Cc: Neal, Sara J (CED) <sara.neal@alaska.gov>; Angela Spencer <spencer@dwardlaw.com>; Laura Miller <lmiller@dwardlaw.com>
Subject: FW: Rimkus/Alaska's Amendment Response

Dear Board,

Thank you in advance for considering the following situation regarding an amended certificate of authorization.

I represent a national engineering company based in Texas, Rimkus Consulting Group, Inc. You can see more about the company at www.Rimkus.com. Rimkus is organized under the laws of the State of Texas and is a registered engineering firm with the Texas PE Board (and many other states where it operates). I have been corresponding with Licensing Examiner Sara Neal (see the email string below) and all involved want to make sure that Rimkus complies with the applicable

rules and regulations as adopted in Alaska. In that regard, Rimkus wants to expand its Alaska engineering practice registration to include civil, mechanical and electrical engineering. Please see the attached COA application, the Rimkus Board resolution appointing the engineers in responsible charge, the sworn statements of those engineers accepting their responsibilities, and the Rimkus check paying the applicable registration fees. Also attached are the articles of incorporation for the company (the company was originally named Forensic Engineers, Inc. but the name was changed to Rimkus Consulting Group, Inc. by amendment on July 25, 1988 [amendment is also included]).

Under Texas law, the Articles of Incorporation can state that the purpose of the company is “any lawful business for which corporations may be incorporated under the Act (Texas Business Corporations Act a/k/a Business Organizations Act.” And, in fact, that is what Rimkus’s state. In general terms, the articles form the company and govern its purpose, and the by-laws are a more detailed statement on how the corporation is to be run. In Rimkus’s case, the company is “run” under the authority of the Board of Directors (BOD) who delegate operational authority to corporate officers (President, VP’s, secretary, CFO...). The Board does so by Board resolution.

In our effort to comply with AS 08.48.241 we had the Rimkus BOD meet and issue a resolution adopting these new areas of practice and designating the engineer in responsible charge for each. We believe this action meets the spirit and intent of AS 08.48.241 in that it is a formal action of the company to authorize the practice areas and officially designate the responsible corporate officers. The BOD resolution is legally binding on the corporation and is, in our humble opinion, the more appropriate way for the company to recognize and expand its practice areas. In contrast, by-laws are rarely changed, and with respect to discreet business operating arenas are usually more general or are silent. In sum, a company takes operational acts at the highest level through its Board of Directors and their resolutions.

We ask that the Board consider the foregoing and provide any guidance it sees fit on the best way to proceed with the amended certificate of authorization, and more specifically on the interpretation that in all corporate instances the by-laws must specifically enumerate the areas of engineering practice instead or in addition to a Board resolution.

Thank you for your time and consideration. Rimkus prides itself on upholding the highest level of engineering practice, and our goal is to make sure our compliance in Alaska is complete.

Sincerely,

David A. Ward, Jr.
The Ward Law Firm

Parkwood One
10077 Grogan's Mill Road, Suite 540
The Woodlands, Texas 77380
(281) 362-7728
(281) 362-7743 Facsimile
ward@dwardlaw.com
www.dwardlaw.com

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From: Neal, Sara J (CED) [<mailto:sara.neal@alaska.gov>]
Sent: Wednesday, August 05, 2020 2:33 PM
To: David Ward <ward@dwardlaw.com>
Subject: RE: Rimkus/Alaska's Amendment Response

Hello David,

I am planning on bringing this issue to the Board. If you want a written response from the Board on how Rimkus should proceed with adding fields of practice without submitting an amendment to the by-laws, please write an email addressing the Board and send it to aelsboard@alaska.gov explaining the situation.

Thank you,

Sara Neal

Licensing Examiner
[Board of Registration for](#)
[Architects, Engineers and Land Surveyors](#)

P (907)465-2540 F (907)465-2974
aelsboard@alaska.gov

During this time of uncertainty you may experience some delays in reaching staff. We appreciate your patience and apologize for any inconvenience. For more information about Alaska's response to COVID-19, please visit coronavirus.alaska.gov.

From: Board of AELS (CED sponsored)
Sent: Monday, June 8, 2020 7:56 AM
To: 'David Ward' <ward@dwardlaw.com>
Subject: RE: Rimkus/Alaska's Amendment Response

Hi David,

I apologize for the delay in getting back with you. I have added the document for the name change to the Rimkus Consulting Group's file.

Unfortunately, there is no work around for the amendment to the by-laws for services offered as it is required in the [AELS Statutes and Regulations](#). Sec 08.48.241 (b).

The Board is currently reviewing the AELS Statutes and Regulations and this is one that is under review however changes will not be in effect till at the earliest November of 2020.

Please let me know if you have further questions,

Sara Neal

Licensing Examiner

[Board of Registration for](#)

[Architects, Engineers and Land Surveyors](#)

P (907)465-2540 F (907)465-2974

aelsboard@alaska.gov

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From: David Ward [<mailto:ward@dwardlaw.com>]

Sent: Monday, June 8, 2020 5:45 AM

To: Board of AELS (CED sponsored) <aelsboard@alaska.gov>

Cc: Angela Spencer <spencer@dwardlaw.com>; Legal Department <legal@rimkus.com>; 'mv@Rimkus.com' <mv@Rimkus.com>

Subject: RE: Rimkus/Alaska's Amendment Response

Good morning Ms. Neal,

I am following up on the below and your availability to have a short phone call about the Rimkus amendment and your email below. I can be reached by email and then call you, or you can call me directly at 281.362.7728. Thank you.

David A. Ward, Jr.
The Ward Law Firm

Parkwood One

10077 Grogan's Mill Road, Suite 540
The Woodlands, Texas 77380
(281) 362-7728
(281) 362-7743 Facsimile
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From: David Ward
Sent: Tuesday, June 02, 2020 3:11 PM
To: aelsboard@Alaska.gov
Cc: 'Angela Spencer (spencer@dwardlaw.com)' <spencer@dwardlaw.com>
Subject: Rimkus/Alaska's Amendment Response
Importance: High

Good afternoon Ms. Neal,

I am an attorney in Texas and I regularly work with Rimkus Consulting Group, Inc. (Rimkus) on their state compliance efforts. Peter Poland, General Counsel at Rimkus, asked that I reach out to you about the below and help provide the necessary information for Rimkus to be in compliance. For your review, attached hereto is an amendment to the Articles of Incorporation for Forensic Engineers, Inc., changing the name to Rimkus Consulting Group. The Rimkus Consulting Group Articles of Incorporation allow the corporation to pursue any lawful business activity, and the bylaws of a Texas for profit corporation do not require the corporation to be any more specific than that averment. Therefore, I would greatly appreciate the opportunity to speak with you about the amendment you mention below.

I'm sorry to hear that COVID reached all the way to Alaska. Someone like me in the lower 48 would have guessed you just might be isolated enough to not get hit. In any event, I can be reached at 281.362.7728 and I am happy to call you if you send me your number. Thank you and I look forward to speaking with you.

Sincerely,

David A. Ward, Jr.
The Ward Law Firm

Parkwood One
10077 Grogan's Mill Road, Suite 540
The Woodlands, Texas 77380
(281) 362-7728
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From: Neal, Sara J (CED) <sara.neal@alaska.gov>
Sent: Thursday, May 28, 2020 12:46 PM
To: Vela, Mireyda <MV@rimkus.com>; Legal Department <legal@rimkus.com>
Subject: [EXTERNAL] Amendment submitted

Hello,

I am in the process of reviewing your amendment in which you are adding two fields of practice: Civil Engineering and Electrical Engineering as well as adding and replacing persons in responsible charge.

Adding fields of practice require an amendment to your by-laws. I did not see any amendment in the by-laws you sent me. The other issue with the by-laws is that they are for Forensic Engineers, Inc. I have no record of Rimkus Consulting Group having any affiliation with Forensic Engineers, Inc.

Before I can finish processing your amendment, I will need an amendment to Rimkus Consulting Group's by-laws, that adds Civil Engineering and Electrical Engineering as fields of practice. This can be submitted to aelsboard@alaska.gov.

Please let me know if you have any further questions,

Sara Neal

Licensing Examiner
[Board of Registration for](#)
[Architects, Engineers and Land Surveyors](#)

P (907)465-2540 F (907)465-2974
aelsboard@alaska.gov

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Alaska State Board of Registration for Architects, Engineers, and Land Surveyors

Board Committees

Investigative Advisory Committee (rotational 2-member teams)	All Members
Licensure Mobility	Chair- Members –
Guidance Manual	Chair – Members – Full Board
Legislative Liaison	Chair – Members –
Emeritus Status	Chair – Members - Full Board
Budget Committee	Chair - Members –
Continuing Education	Chair – Members –

Alaska State Board of Registration for Architects, Engineers and Land Surveyors

GUIDANCE MANUAL

*on laws governing architecture, engineering, land surveying, &
landscape architecture*

March 2019 Edition

MISSION

To protect the public health, safety, and welfare through the regulation of the practice of architecture, engineering, land surveying, and landscape architecture by:

- Ensuring that those entering these practices meet minimum standards of competency, and maintain such standards during their practice;
- Requiring licensure to practice in the State of Alaska; and
- Enforcing both the licensure and competency requirements in a fair and uniform manner.

This manual is updated periodically. The most recent version is available on the AEIS website: ProfessionalLicense.Alaska.gov/BoardofArchitectsEngineersLandSurveyors.aspx

TABLE OF CONTENTS

PURPOSE	1
INTRODUCTION	1
DEFINITIONS OF PRACTICE	2
(12) “practice of architecture”	2
(13) “practice of engineering”	2
(14) “practice of land surveying”	2
(15) “practice of landscape architecture”	2
12 AAC 36.069. Standards for Registration as a Landscape Architect	3
EXEMPTIONS	4
Sec. 08.48.331. Exemptions	4
Additional Clarification on AS 08.48.331(a)(10) Industrial Exemption:	6
COMMON SERVICES PROVIDED	7
The Architect	7
The Engineer	9
Definitions of Professional Engineering Branches (12 AAC 36.990(a))	10
The Land Surveyor	13
The Landscape Architect	17
GUIDELINES FOR CONSTRUCTION DRAWINGS	19
Cover Sheet	19
Survey Control Sheet	19
Land Survey/Plot Plan/Boundary Survey	19
Site Development Plan	19
Landscape Plan	20
Plans	20
Foundation Plans	21
Exterior Elevations	21
Building and Wall Sections	21
Framing Plans	21
Mechanical System	21
Plumbing System	21

Electrical System	21
Specifications	22
Project Changes	22
SEALING PROFESSIONAL WORK	23
Stamping by Professional Expertise	23
Clarification of Registration Numbers.....	23
Sealing and Signing	23
Stamping and Signing of Plans	24
Site Adaptation & Field Alterations of Sealed Documents	26
AELS CONTACT INFORMATION	27
AELS Board	27
Board & Division Web Addresses:	27
Reporting Potential Violations	27
STATE FIRE MARSHAL’S OFFICE	28
BUILDING OFFICIALS AND PERMITTING CONTACTS	29

PURPOSE

Published by the Alaska State Board of Registration for Architects, Engineers, and Land Surveyors (AELS), the intent of this guidance manual is to provide aid to those seeking to understand the laws that govern architecture, engineering, land surveying, and landscape architecture. The intended audiences of this publication include government, building, planning, and public officials as well as architects, engineers, land surveyors, and landscape architects.

The Alaska Statutes, Regulations, Municipal Building and Zoning Codes, and Ordinances will take precedence over any conflict with information contained in this manual. Contact information for the AELS Board, State Fire Marshal's Office, and Offices of Building and Planning Officials is included in this document.

INTRODUCTION

Professional registration laws (statutes) work together with regulations, building and zoning codes, and ordinances to protect the public's health, safety, and welfare. Jurisdictions and boards, such as the AELS Board, exist to protect the public from harm created by unprofessional practice. This harm may be in the form of unsafe structures, hazardous site conditions, dangerous road design, wasted public money, or other perilous conditions. Building officials promulgate and enforce building code requirements to protect public health and safety. Planning and public safety officials enforce similar regulations.

This Guidance Manual focuses on basic information concerning the practice of architecture, engineering, land surveying, and landscape architecture. Professionals in these disciplines must complete education criteria, satisfy training standards, and pass rigorous technical and practice examinations (Alaska Statute 08.48; AELS Regulation 12 AAC 36). The public is protected through compliance with these laws and enforcement by Alaska State Registration Officials.

Architects, engineers, land surveyors, and landscape architects are charged with safeguarding the public's health, safety, and welfare through execution of their professional responsibilities and duties. This Guidance Manual addresses professional activities found within the Alaska Statute as well as recommended minimum practices and AELS Board policies. Information found within this manual aims to address frequently asked questions without modification to any statutory requirements.

Architects, engineers, land surveyors, and landscape architects are advised to contact local building, planning, and public safety officials with regard to specific site and building regulations, ordinances, codes, permits, and to address requirements that may vary between jurisdictions.

DEFINITIONS OF PRACTICE

The planning of land is the development of drawings, documents, and models defining proposed land use, land configuration, and improvements for a specific parcel of land. Alaska State Statute 08.48.341 defines architecture, engineering, land surveying and landscape architecture as follows:

(12) “practice of architecture” means professional service or creative work in the design of buildings, the teaching of advanced architectural courses in institutions of higher learning, consultation, investigation, evaluation, planning, design, and professional observation of construction of public or private buildings, works, or projects, and architectural review of drawings and specifications by regulatory agencies; “practice of architecture” may by regulation of the board include mechanical, electrical, or structural design of minor importance;

(13) “practice of engineering” means professional service or creative work, the adequate performance of which requires the specialized knowledge of applied mathematics and sciences, dealing with the design of structures, machines, equipment, utilities systems, materials, processes, works, or projects, public or private; the teaching of advanced engineering courses in institutions of higher learning; the direction of or the performance of engineering surveys, consultation, investigation, evaluation, planning, and professional observation of construction of public and private structures, works, or projects and engineering review of drawings and specifications by regulatory agencies; “practice of engineering” may by regulation of the board include architectural building design of minor importance, but it does not include comprehensive architectural services;

(14) “practice of land surveying” means the teaching of land surveying courses at an institution of higher learning, or any service or work the adequate performance of which involves the application of special knowledge of the principles of mathematics, the related physical and applied sciences, and the relevant requirements of law for adequate evidence of the act of measuring and locating land, geodetic and cadastral surveys for the location and monumentation of property boundaries, for the platting and planning of land and subdivisions of land, including the topography, alignment, and grades for streets, and for the preparation and perpetuation of maps, record plats, field note records and property descriptions that represent these surveys; (see *Common Services Provided* section for additional information)

(15) “practice of landscape architecture” means professional services or creative work in site investigation, reconnaissance, research, planning, design, and preparation services related to drawings and construction documents, observation of construction, and location, arrangement, and design of incidental and necessary tangible objects and features for the purpose of

(A) preservation and enhancement of land uses and natural land features;

(B) location and construction of aesthetically pleasing and functional approaches for structures, roadways, and walkways;

(C) establishing or maintaining trails, plantings, landscape irrigation, landscape lighting, and landscape grading; or

(D) generalized planning of the development of land areas in a manner that is sensitive to the area's natural and cultural resources.

12 AAC 36.069. Standards for Registration as a Landscape Architect

In accordance with AS 08.48.331(b), and except as exempted in AS 08.48.331(a), design or creative work involving any of the following constitutes the practice of an aspect of landscape architecture that affects the public health or safety and thus requires registration as a landscape architect:

- (1) grading, clearing, or shaping of land;
- (2) landscape irrigation;
- (3) outdoor planting plans;
- (4) outdoor play apparatus;
- (5) outdoor structures.

In regards to "outdoor play apparatus," per AS 08.48.281, another design professional may practice landscape architecture if the services being performed by the person are within the scope of practice authorized by another license that is held by the person, and it is within the registrant's area of expertise. Historically, architects and civil engineers prepared site plans, including sites that contain playground equipment, and may design playgrounds. Regardless of whether the designer is an architect, civil engineer, or landscape architect, he or she should have the education and experience with playgrounds to be qualified to design them.

EXEMPTIONS

Unless specifically exempt under AS 08.48.331 all projects (public, commercial and private) that require the involvement of architects, engineers, land surveyors and landscape architects, must utilize Alaska registered professionals in positions of responsible charge¹.

The State of Alaska exempts the following activities from the licensing regulations under AS 08.48.331, which reads:

Sec. 08.48.331. Exemptions

(a) This chapter does not apply to:

- (1) a contractor performing work designed by a professional architect, engineer, or landscape architect or the supervision of the construction of the work as a supervisor or superintendent for a contractor;
- (2) workers in building trades crafts, earthwork, groundskeeping, or nursery operations, and superintendents, supervisors, or inspectors in the performance of their customary duties;
- (3) an officer or employee of the United States government practicing architecture, engineering, land surveying, or landscape architecture as required by the person's official capacity;
- (4) an employee or a subordinate of a person registered under this chapter if the work or service is done under the direct supervision of a person registered under this chapter;
- (5) associates, consultants, or specialists retained by a registered individual, a partnership of registered individuals, a corporation, a limited liability company, or a limited liability partnership authorized to practice architecture, engineering, land surveying, or landscape architecture under this chapter, in the performance of professional services if responsible charge of the work remains with the individual, the partnership, or a designated representative of the corporation, limited liability company, or limited liability partnership;
- (6) a person preparing drawings or specifications for
 - (A) a building for the person's own use and occupancy as a single family residence and related site work for that building;
 - (B) farm or ranch buildings and their grounds unless the public health, safety, or welfare is involved;
 - (C) a building that is intended to be used only as a residence by not more than:

¹ "Responsible charge" means the direct control and personal supervision of work (per AS 08.48.341(20)).

Updated: 3.11.2019

- (i) four families and that is not more than two stories high and the grounds of the building; or
- (ii) two families and that is not more than three stories high and the grounds of the building, if the building complies with any applicable building or residential code adopted by a municipality where the building is located;
- (D) a garage, workshop, or similar building that contains less than 2,000 square feet of floor space to be used for a private noncommercial purpose and the grounds of the building;
- (7) a specialty contractor licensed under AS 08.18 while engaged in the business of construction contracting or designing systems for work within the specialty to be performed or supervised by the specialty contractor, or a contractor preparing shop or field drawings for work that the specialty contractor has contracted to perform;
- (8) a person furnishing drawings, specifications, instruments of services, or other data for alterations or repairs to a building or its grounds that do not change or affect the structural system or the safety of the building, or that do not affect the public health, safety, or welfare;
- (9) a person who is employed by a postsecondary educational institution to teach engineering, architectural, or landscape architectural courses; in this paragraph, "postsecondary educational institution" has the meaning given in AS 14.48.210;
- (10) an officer or employee of an individual, firm, partnership, association, utility, corporation, limited liability company, or limited liability partnership, who practices engineering involved in the operation of the employer's business only, and further provided that neither the employee nor the employer offers engineering services to the public; exclusions under this paragraph do not apply to buildings or structures whose primary use is public occupancy;
- (11) a person while involved in revegetation, restoration, reclamation, rehabilitation, or erosion control for disturbed land;
- (12) a person while maintaining or directing the placement of plant material;
- (13) an employee, officer, or agent of a regulatory agency of the state or a municipality when reviewing drawings and specifications for compliance with the building codes of the state or a municipality if the drawings and specifications have been signed and sealed by a professional architect or professional engineer or the preparation of the drawings and specifications is exempt under this section from the requirements of this chapter; in this paragraph, "building codes" includes codes relating to building, mechanical, plumbing, electrical, and fire standards.
- (b) The requirement to be registered as a landscape architect under this chapter only applies to a person who practices an aspect of landscape architecture that the Board has determined affects the public health or safety.

Additional Clarification on AS 08.48.331(a)(10) Industrial Exemption:

AS 08.48.331(a)(10) contains certain limitations and should not be interpreted as a blanket exemption. Unlicensed individuals, regardless of their employer, are not authorized to design buildings or other structures whose primary use is public occupancy, nor are they authorized to provide professional services to the public. Based on these limitations, qualified organizations may design, using their own employees (licensed or not), their general system; however, the connection from that system to another entity's property must be designed by an Alaska licensed professional, otherwise the designing organization would be providing engineering, architectural, land surveying, and/or landscape architectural services to the public.

Land surveys and legal descriptions that relate to property rights always require the use of licensed land surveyors. The industrial exemption (AS 08.48.331(a)(10) explained above does not apply to land surveys and legal descriptions because the location of easements and similar land rights² impacts the adjoining properties.

² A common analogy compares a parcel's land rights as a bundle of sticks. Each stick representing a right of use that assigns one stick the right to occupy the property, a second stick the right to build a structure on the property, a third stick the right to landscape the property, and so forth. In this example and as commonly occurs, a public utility may have a utility easement which gives them two sticks that represent their rights to construct and maintain utility lines on or within that easement.

COMMON SERVICES PROVIDED

The following descriptions reference general areas of responsibility for architects, engineers, land surveyors, and landscape architects. These descriptions are not all-inclusive and are intended to give general guidance that more fully defines the professional field of practice for each discipline.

The Architect

General areas of responsibility for architects are based on the definition of the practice of architecture. A practicing architect is a person who has a valid registration issued by the state within which he or she intentionally assumes responsibility for providing professional services, including but not limited to safeguarding the health, safety and property and promoting the public's welfare for enhancement of both the natural and built environment. These enhancements shall be functional, aesthetically appropriate, sustainable, and cost effective. The result of the architect's professional service shall contribute to the physical, sociocultural, and emotional wellbeing of the public.



The following list provides examples of professional services that architects typically provide:

- Overall Project Management: design team coordination and interface with Owner and/or Contractor, construction management and inspection; project planning and programming; scheduling; cost estimating; application of federal, state, and local design standards.
- Site Layout: analysis of site options for purposes of site selection; analysis of specific site features for proposed development; land use laws; building layout impacts on the site.
- Building Codes and Fire Safety: occupancy groups and intended uses; types of construction; occupant loads; application of specific code requirements as they pertain to design features; barrier-free access; fire ratings and assemblies; product and material specifications; specialized functions and operations such as hazardous materials; abatement of hazardous materials.
- Building Circulation and Egress: corridors; travel distances; exits and exit widths; door systems; roof access; stairways, escalators, and elevator requirements; vestibules; signage.
- Space Planning: furniture and partition systems; built-in casework and fixtures; sound attenuation and transmission; detailed knowledge of building types (schools, hospitals, recreation facility, etc.) and specialized detailed knowledge of all spaces within that building type.

Updated: 3.11.2019

Page 7 of 29

- Materials Selection: appropriate interior and exterior finish materials; wall and floor construction systems;
- Energy and Sustainability: building envelope systems and assemblies including insulation and vapor barriers; recycled materials; construction solid waste streams; coordination and integration of systems by other design professionals.

The Engineer

In the State of Alaska, engineers may obtain a certificate of registration in any one or more of the following branches of engineering. The branches, listed below in alphabetical order, are identified by their two-letter abbreviations. Engineers shall enter their branch abbreviation within the seal on stamped documents below their signature and preceding their registrant number as stipulated in 12 AAC 36.180(b) SEAL:

AG – Agricultural

CE – Civil

EE – Electrical

FP – Fire Protection

ME – Mechanical

EM – Mining and Mineral Processing

NU – Nuclear

SE – Structural

EC – Chemical

CS – Control Systems

EV – Environmental

IN – Industrial

MM – Metallurgical and Materials

NM – Naval Architecture and Marine

EP – Petroleum



12 AAC 36.205: A person who holds a current certificate of registration as an engineer in the State of Alaska may practice in that branch/those branches of engineering, as defined in 12 AAC 36.990(a), even if the engineering practice includes activities that are included in another branch of engineering defined in 12 AAC 36.990(a).

The following section includes further explanations of the general areas of responsibility for each of the above branches. The descriptions are not all-inclusive but intended to give general guidance on the Scope of Practice for the different branches of engineering.

Definitions of Professional Engineering Branches (12 AAC 36.990(a))

"agricultural engineering" means the branch of professional engineering that embraces studies and activities related to facility engineering of plant, animal, and commodity environments and structures; machinery involving power, electrical and electronic machines, controls and sensors; natural resource engineering involving soil, water and plant systems; process engineering involving food, feed, fiber, fuel products; and the organizational and economic aspects of these studies and activities;

"chemical engineering" means the branch of professional engineering that embraces studies and activities relating to applied chemistry, both industrial and nonindustrial, concerned with chemical materials, their composition, locations, transportation, and storage; chemical and physical-chemical processes naturally occurring or artificially operated, their matter and energy changes, the conditions of temperature, concentration and media for those changes, including apparatus and analytical control; chemical products, their quality, quantity, applications, uses, and values; preparation of materials for public or industrial use, including water supply, waste abatement, and pollution control; and the organizational and economic aspects of these studies and activities;

"civil engineering" means the branch of professional engineering that embraces studies and activities relating to research, design, and construction of fixed works for irrigation, drainage, waterpower, water supply and treatment, flood control, inland waterways, harbors, municipal improvements, railroads, highways, tunnels, airports and airways, sewerage, refuse disposal, foundations, structures, and bridges, and the organizational and economic aspects of these studies and activities;

"control systems engineering" means the branch of professional engineering that embraces studies and activities relating to sensor technologies and measurement; signals and transmission, final control elements regarding valves, pressure relieving devices, and other final control elements, control systems analysis and implementation; and the organizational and economic aspects of these studies and activities;

"electrical engineering" means the branch of professional engineering that embraces studies and activities relating to generation, transmission and utilization of electrical energy, fire detection and alarm systems, control systems, electronic systems, and to telecommunications systems and facilities, including the design of electrical, electronic and magnetic circuits and components, and the technical control of their operation and of the design of electrical, fire alarm gear, control, electronic and telecommunications gear, and the organizational and economic aspects of these studies and activities;

"environmental engineering" means the branch of professional engineering that embraces studies and activities relating to wastewater, storm water, potable water, and water resources; ambient air, emissions sources, and control strategies; solid, hazardous, and special waste; environmental

assessments, remediation, and emergency response and applicable codes, standards, regulations, guidelines; and the organizational and economic aspects of these studies and activities³;

"fire protection engineering" means the branch of professional engineering that embraces studies and activities relating to fire protection analysis, fire protection management, fire science and human behavior, fire protection systems, fire building systems, and the organizational and economic aspects of these studies and activities;

For the purposes of AS 08.48.331(a)(14), "designing fire detection or suppression systems" includes those studies and activities related to the installation, maintenance, and inspection of those systems, including the direction of or the performance of fire protection systems surveys, consultation, investigation, evaluation, planning, and observations of construction and the organizational and economic aspects of those studies and activities.

"industrial engineering" means the branch of professional engineering that embraces studies and activities relating to facilities engineering and planning involving facility requirements, design alternatives, material handling techniques and equipment, systems analysis and design including processes, costing and performance measurement, logistics including production planning and control, distribution and storage and warehousing methods, methods to measure work, workstation design and analysis, and safety, quality engineering and control, and the organizational and economic aspects of these studies and activities;

"mechanical engineering" means the branch of professional engineering that embraces studies and activities relating to the generation, transmission and utilization of energy in the thermal and mechanical form; engineering issues relating to the production of tools, machinery and their products; mechanical processes, heating, air conditioning, refrigeration, product transport, fire and smoke suppression, and plumbing; and the research, design, production, operation, control, and the organizational and economic aspects of these studies and activities;

"metallurgical and materials engineering" means the branch of professional engineering that embraces studies and activities relating to the production of metals, metal objects, materials, testing procedures, metal processing, failure analysis procedures and the development of metal alloys, the research, design, construction, and development of devices and facilities of production, and the organizational and economic aspects of these studies and activities;

"mining and mineral processing engineering" means the branch of professional engineering that embraces studies and activities relating to the exploration, location, and recovery of mineral commodities, and the research, design, construction, and development of structures, devices, and

³ Hazardous building materials surveys and abatement work are conducted within the framework of OSHA and EPA. Those entities are the most appropriate to regulate the requirements.

facilities of production, and the organizational and economic aspects related to these studies and activities;

"naval architecture and marine engineering" means the branch of professional engineering that embraces the studies and activities relating to the mechanics of rigid and deformable bodies, exterior loads on military, public, commercial or private vessels or marine facilities, structural designs, applications, and considerations, vibration considerations including local, vortex induced, flow induced, and global vibrations, intact and damaged hydrostatic stability, methods and procedures, dynamic stability in waves, hydrodynamics, wind and waves, hull forms and design, marine engineering involving thermodynamics, internal fluid flow, propulsion and power generators, machine design, HVAC/refrigeration and electrical systems, materials corrosion and corrosion control, navigation and vessel control, hull outfitting, weight engineering, shipbuilding and repair engineering, rules and regulations, human factors, and safety systems, and the organizational and economic aspects of these studies and activities;

"nuclear engineering" means the branch of professional engineering that embraces the studies and activities relating to nuclear power systems and science, nuclear components and systems, construction, operational regulations, emergency planning, licensing regulation, codes and standards, nuclear fuel and waste management, nuclear radiation, protection, radiation shielding, interaction of radiation with matter, nuclear criticality, kinetics, neutronics, and nuclear measurements and instruments, and the organizational and economic aspects of these studies and activities;

"petroleum engineering" means the branch of professional engineering that embraces studies or activities relating to the exploration, location, and recovery of natural fluid hydrocarbons, and the research, design, production, operations of devices, facilities of production, and the organizational and economic aspects of these studies and activities;

"structural engineering" means the branch of professional engineering that embraces the studies and activities relating to the investigation, evaluation, analysis, design and construction of buildings, bridges, and other structures such as walls, columns, slabs, beams, trusses, or similar members requiring force-resisting and load bearing members and their connections, or similar members used singly or as a part of a larger structure, and the organizational and economic aspects of these studies and activities.

The Land Surveyor

The Alaska statutory definition of Land Surveying covers a broad range of activities performed in support of the platting and planning of land. Those activities generally include measurement, delineating, describing, locating, subdividing, and mapping the surface of the earth and improvements thereon.



The actual statute reads:

AS Sec. 08.48.341

(7) “land surveyor” means a professional land surveyor;

(14) “practice of land surveying” means the teaching of land surveying courses at an institution of higher learning, or any service or work the adequate performance of which involves the application of special knowledge of the principles of mathematics, the related physical and applied sciences, and the relevant requirements of law for adequate evidence of the act of measuring and locating land, geodetic and cadastral surveys for the location and monumentation of property boundaries, for the platting and planning of land and subdivisions of land, including the topography, alignment, and grades for streets, and for the preparation and perpetuation of maps, record plats, field note records and property descriptions that represent these surveys;

While AS Sec. 08.48.341 (14) attempts to define land surveying activities in an inclusive and durable manner, the AELS board recognizes many of the regulated activities are highly complex and that the effects of these activities may not become apparent until years later.

The language does not address technology, accuracy, or generated products, however when performed in support of the platting or planning of land the following sample activities fall under the practice of land surveying per AS 08.48.341 (*note that this is NOT a complete list of covered activities*):

- Performing topographic surveys – performed using photogrammetry, LiDAR, Structure from Motion (SfM), Global Navigation Satellite System (GNSS –which includes GPS), total station, sonar, or any other measurement method

- Making topographic maps or contour maps or existing ground surfaces –digital or printed.
- Performing volumetric surveys – surveys used to determine volumes regardless of the measurement method (see topographic surveys)
- Mortgage/as-built surveys – these show the relationship between improvements and property boundaries
- Using a drone (UAV/UAS) to take photos used to produce maps or other data products for the platting or planning of land
- Taking photos to produce maps or other data products (regardless of where the camera is mounted) for the platting or planning of land
- Collecting scan data (LiDAR) of land or improvements regardless of where the scanner is mounted for the platting or planning of land
- Performing hydrographic surveys – measurements to determine the location of the land or improvements under the water;
- Preparing Site Plans - these may also include information that falls under the practice of engineering, where the site plan shows both boundaries or control and civil design, the sheet must be sealed by both the land surveyor and engineer in responsible charge for their respective work
- Preparing Survey Control Sheets – maps showing survey control to be used to place improvements
- Publishing GIS webpages showing property lines overlaid on an aerial image
- Establishing the elevation of a building
- Producing elevation information for a Federal Emergency Management Agency (FEMA) Elevation certificate.
- Writing a metes and bounds legal description
- Preparing a map showing easements or property boundaries
- Preparing a map/plan showing the proposed improvements (limits of excavation, luminaires, storm drain improvements, etc.) and the property/right-of-way lines, where a plan shows both boundaries or control and civil design, the sheet must be sealed by both the land surveyor and engineer in responsible charge for their respective work
- Determining right-of-way impacts for proposed improvements
- Creating parcel maps/exhibits for the acquisition of land
- Creating a shore fisheries plat
- Locating the position of wetland limits (as marked by a wetlands scientist or other qualified professional)
- Using a GNSS/GPS device to control the operation of grading machinery
- Developing machine control models for land development (buildings, parking lots, roads, etc.)

The following activities fall under the definition of land surveying, and must be performed by, or under the direct supervision of a registered land surveyor in Alaska:

- The platting of land is making maps or plans of land describing the land and its features. This does not include generalized maps made to orient end users
 - e.g. road maps, maps showing the general location of features (such as a map for park users), maps showing the location of exits in a building do not need to be prepared by a licensed land surveyor.

Additionally, the Preparation of Orthophotos and Orthomosaic Imagery may fall under the definition of land surveying when prepared for use in activities described in AS 08.48.341(14) such as:

1. measuring and locating land
2. platting and planning of land
3. preparation of topographic maps

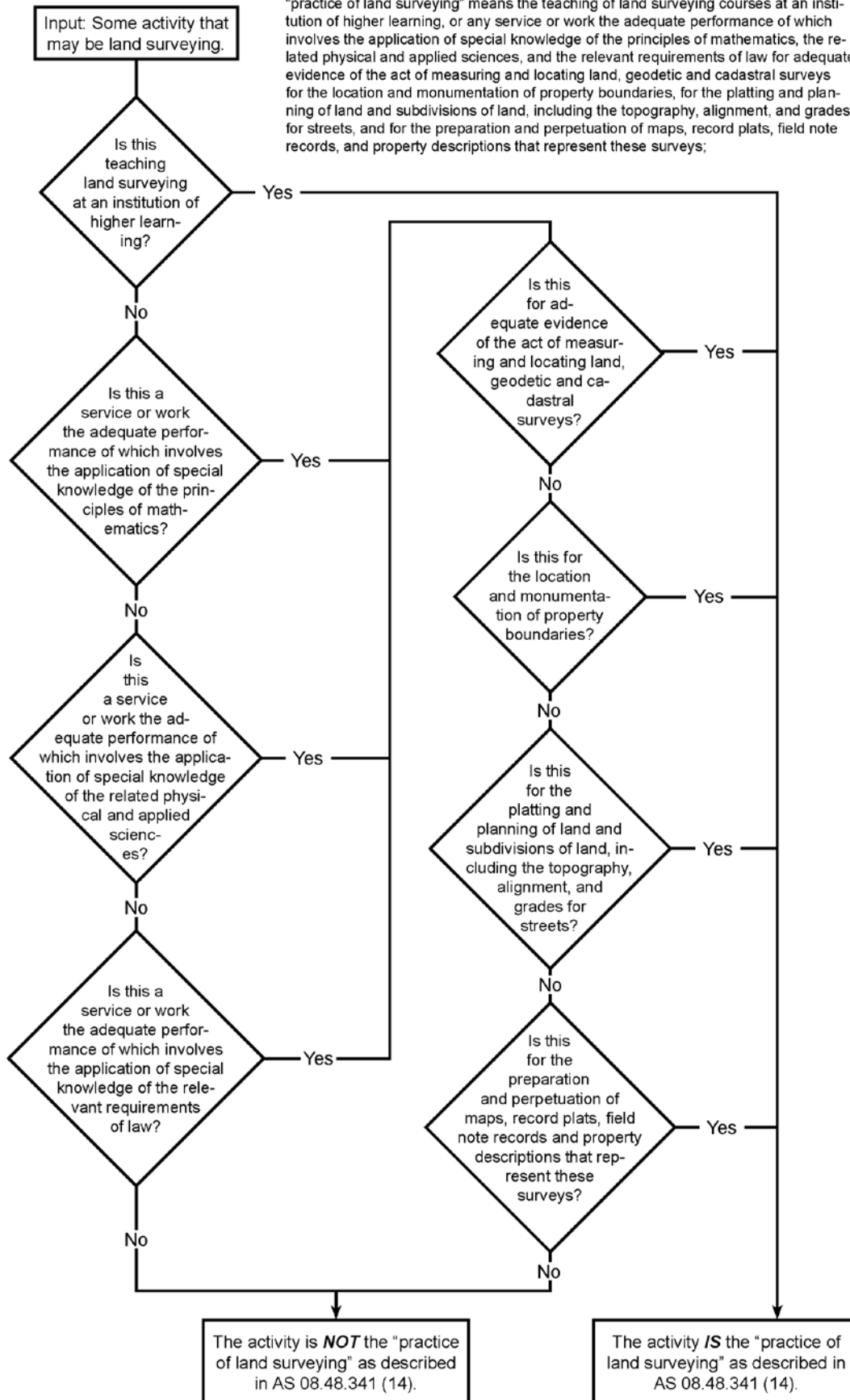
If the use is limited to activities that are included in AS 08.48.341(14), then the orthomosaic imagery must be prepared by or under the supervision of a land surveyor registered in Alaska. If orthoimagery and mapping will be relied upon or used for the activities covered under AS 08.48.341(14), such imagery and mapping must be prepared under the direct supervision of a professional land surveyor registered in Alaska.

If the use is outside of these activities, a registered land surveyor may not be required. Additionally, AS 08.48.331 (3) exempts “an officer or employee of the United States government practicing architecture, engineering, land surveying, or landscape architecture as required by the person’s official capacity” from licensure requirements.

The flowchart on the following page is intended to assist in determining if an activity falls under AS 08.48.341(14) practice of land surveying. An 11X17 version of the Practice of Land Surveying Flowchart is available under the Land Surveyors section of the [AELS FAQs](#) webpage.

"Practice of Land Surveying" as defined in AS 08.48.341 (14)

"practice of land surveying" means the teaching of land surveying courses at an institution of higher learning, or any service or work the adequate performance of which involves the application of special knowledge of the principles of mathematics, the related physical and applied sciences, and the relevant requirements of law for adequate evidence of the act of measuring and locating land, geodetic and cadastral surveys for the location and monumentation of property boundaries, for the platting and planning of land and subdivisions of land, including the topography, alignment, and grades for streets, and for the preparation and perpetuation of maps, record plats, field note records, and property descriptions that represent these surveys;



The Landscape Architect

The general areas of responsibility for landscape architects based on the statutory definitions of landscape architecture is not all-inclusive but rather, intended to give general guidance on the definition of the practice of landscape architecture.



1. Planning:
 - a. Site Analysis
 - b. Visual Assessment
 - c. Environmental Assessment
 - d. Recreation Assessment
 - e. Vegetation Management
 - f. Urban and Town Planning
 - g. Regional Planning
 - h. Parks and Recreational Facilities
 - i. Land Development
 - j. Historic preservation and Reclamation
2. Design:
 - a. Site layout
 - b. Grading
 - c. Drainage
 - d. Planting
 - e. Landscape Irrigation
 - f. Landscape Lighting
 - g. Pedestrian/Bicycle/Equestrian/Vehicular circulation
 - h. Site Furnishings and Amenities
 - i. Recreational Facilities including Children's Play Apparatus
 - j. Outdoor landscape structures
 - k. Wetland and Wildlife Habitat Mitigation/Restoration

- l. Soil Stabilization
 - m. Bio-infiltration, Green Infrastructure, and Low Impact Development
 - n. Urban Design
- 3. Construction:
 - a. Site Construction Management and Administration
- 4. Other registered disciplines (practices) overlap with landscape architecture and, depending on the work, could be stamped by other registrants per AS 08.48.281(b).

GUIDELINES FOR CONSTRUCTION DRAWINGS

Drawings and specifications submitted to building, planning or public safety officials must be scaled, include dimensions, and clearly show the project in its entirety. The minimum required drawings depends on the size, nature and complexity of the project. Construction drawing packages should include, at a minimum, the following sheets/drawings/plans:

Cover Sheet

The cover sheet or following sheet should contain the following information:

1. Project identification
2. Project address and location map including legal description
3. Identification of all design professionals
4. Design/Code Criteria:
 - a. Land use zone/setback requirements/parking requirements
 - b. Applicable local, state, and/or federal design standards
 - c. Relevant code information including, but not limited to:
 - a. Occupancy group/separation requirements
 - b. Construction type
 - c. Height and number of stories
 - d. Square footage/allowable area of each occupancy by floor
 - e. Occupant load
 - f. Exiting requirements
 - g. Design loads including seismic/wind zones
 - h. Fire sprinklers/standpipes
 - i. Special Inspection requirements

Survey Control Sheet

The survey control sheet contains the information required to relate the proposed improvements to their intended real-world location.

Land Survey/Plot Plan/Boundary Survey

The Land Survey should show the surveyed boundary of land with existing structures, easements, and setbacks.

Site Development Plan

These plans should include the existing conditions and proposed features:

1. property lines
2. streets
3. easements
4. encroachments*
5. setbacks

6. any existing buildings or structures
7. the proposed structure
8. proposed utility services
9. required parking,
10. drainage and grading information (referenced to finish floor and adjacent streets)
11. drainage inflow and outfall locations
12. any areas required to be maintained for drainage purposes

*Encroachments are improvements owned by others that exist partially, or completely, on the subject parcel.

Landscape Plan

Using a landscape site plan, additional landscape plans should include:

1. vegetation management
2. site layout
3. aesthetics of overall project design
4. site circulation, access, and exiting
5. recreation facilities including playground structures
6. landscape grading and drainage including green infrastructure, bio infiltration, and/or Low Impact Development
7. new plantings
8. plant schedule
9. site furnishings and amenities
10. landscape irrigation
11. irrigation schedule
12. environmental impacts
13. barrier free routes and design

Plans

Plans, including floor, basements, and roofs, should include:

1. rooms with their intended uses identified
2. dimensions and locations of elements such as openings, vertical circulation components, casework, fixtures
3. door and window schedules
4. fire assemblies, fire barriers, draft stops, and fire rescue areas
5. area and occupancy separations
6. exterior and interior finishes
7. wall, floor, ceiling, and roof assemblies
8. extent of demolition for existing buildings

Foundation Plans

Foundation plans should show:

1. foundations and footings (size, location, thickness, etc.)
2. materials and reinforcing
3. embedded anchoring such as anchor bolts, hold-downs, post bases, etc.
4. soils boring locations

Exterior Elevations

Exterior elevations should show all building elevations and indicate building materials.

Building and Wall Sections

Building and wall sections should show materials of construction, and details of assemblies, including penetrations

Framing Plans

Framing plans should include:

1. structural members to sizes, methods of attachment, location, spacing, and materials
2. sheathing characteristics, slabs, or decking
3. lateral force-resisting elements locations.

Mechanical System

The entire mechanical system, including units, unit sizes, mounting details, ductwork and duct sizes should be shown. Indicate fire dampers (where required) and provide equipment schedules.

Plumbing System

Plumbing systems should include:

1. fixtures
2. piping
3. slopes
4. materials
5. fitting types (DWV type fittings, etc.)
6. sizes
7. point of connections to site utilities
8. size and pressure
9. utility lines size and water pressure

Electrical System

Electrical systems should show:

1. interior, exterior, and site electrical fixtures

2. circuit protection requirements (ground-fault, arc-fault and short circuit protection)
3. wiring sizes and circuiting
4. grounding
5. panel
6. schedules,
7. single line diagrams
8. load calculations
9. fixture schedules (unless each fixture is labeled on drawings)
10. point of connection to utility
11. provision for disconnect

Specifications

Specifications should be included on the drawings or in booklet form, and further define construction components, materials and expectations for construction quality, finishes, and all pertinent equipment. Schedules may be incorporated in the project manual in lieu of on drawings.

Project Changes

The responsible design professional shall notify the building official of significant changes throughout the bidding and construction process and provide revised drawings, calculations, and/or other appropriate documents. For clarity, all revisions shall be on the drawings and be submitted.

SEALING PROFESSIONAL WORK

The law and applicable codes in Alaska have requirements that professional submissions must be sealed by the professional who prepared the documents and/or supervised the preparation. Specific Alaskan laws require that drawings used for construction bear the seal of an Alaskan registered architect, engineer, land surveyor, and/or landscape architect, as appropriate. Additionally, the International Building Code as adopted by 13 AAC 50-55 contains this requirement.

Registered architects, engineers, land surveyors, and landscape architects are responsible for their professional design services. The public, as well as building officials, rely on the professional's expertise. As a result, professional submissions, such as drawings, specifications, and calculations, should clearly show the identity of the professional who prepared them. Drawings, specifications, and calculations must have a signed and dated seal and otherwise comply with the requirements of state laws. Ultimately, the responsibility for any deficiencies may not be clear without the required proper professional identification.

The State Fire Marshal or the designated building official require that all drawings have the seal of an architect, engineer, land surveyor, or landscape architect, as appropriate. Alternately, a notation on the drawings and/or building permit applications must note the reason for the lack of a seal or the state law exempting the preparation of the drawings by registered professionals. (AS 08.48.331)

Stamping by Professional Expertise

Architects, engineers, land surveyors, and landscape architects, as design professionals, are responsible for performing design services within their area of expertise. Registered professionals may not perform design services outside their area of expertise or registration. They shall not seal work performed by others unless they were prepared under the registrants' direct supervision.

Sealing plans for which a registrant does not have the expertise and registration is a violation of AS 08.48. Sealing or stamping work outside of expertise is NOT permitted! A registrant may not sign or seal a drawing or document dealing with professional services in which the registrant is not qualified to sign or seal by virtue of education, experience, and registration as specified in 12 AAC 36.185(a)(1). In addition, the preparation of and the sealing, signing and dating of plans, documents or calculations by an out of state individual who is not registered in the State of Alaska is a violation of AS 08.48.

Clarification of Registration Numbers

For alpha-numeric license numbers, the board advises engineering registrants to use the two letter, branch of engineering identification and only the numeric portion of their license number on their seal. For example AELC1234, would be CE 1234 versus CE AELC1234.

Sealing and Signing

The minimum acceptable standards for the sealing and submittal of drawings and documents are that all final documents must include a seal, a signature, and a date. An electronic image of the signature may

be used over the seal if the Registrant or the owner of the documents retains an original copy of the documents. The documents must be accessible for later reference having either:

1. An original hand signature over the seal; or
2. Software in place that will automatically remove or modify the electronic image of the signature if the document is modified.

Signatures shall be located over the seals. Dates shall be included by electronically or manually inserting them within the seals or within 2" of the seals. Seals shall be large enough so text within them is legible.

Stamping and Signing of Plans

All design work so performed shall be sealed and signed as specified in 12 AAC 36.185(a)(3). Additionally, per 12 AAC 36.185(g), the registrant shall include on all documents that are required to be signed and sealed: its business name, physical address, and telephone number; the project name or identification; the project address or location; and the certificate of authorization number issued to the corporation, limited liability company, or limited liability partnership to practice architecture, engineering, land surveying, or landscape architecture, if applicable.

Each sheet of final drawings approved for construction shall bear the signed and dated seal of the responsible professional(s) (i.e., architect, engineer, surveyor, or landscape architect). Cover sheets that do not include design elements do not require a seal. Alaska Statute 08.48.221 Seals specifically states, "When a registrant issues final drawings, specifications, surveys, plats, plates, reports, or similar documents, the registrant shall stamp the documents with the seal and sign the seal." The board discussed the statute and agreed unanimously that final drawings, specifications, surveys, plats, plates, reports, or similar documents include, but is not limited to, parcel exhibits, parcel plats, legal descriptions, and similar professional works that may or may not be part of other documents.

Drawings, specifications, or other documents shall be sealed and signed as follows:

Preliminary Documents do not necessarily require stamping and signing. If they are sealed, they shall be clearly identified as Preliminary or Draft Documents.

Record Drawings⁴ are not final documents, but rather statements regarding what has been installed. Record drawings are typically produced from contractor-supplied information to show changes that

⁴ This section is not referring to "Record of Survey" drawings as defined under AS 34.65.030 Records of Survey: After making a survey in conformity with the practice and definition of land surveying, a land surveyor shall record with the district recorder a record of the survey within 90 days if the survey discloses

- (1) material evidence or physical change that in whole or in part does not appear on a plat of record previously filed or recorded in the office of the district recorder or in the records of the Bureau of Land Management;
- (2) a material discrepancy with a plat of record previously filed or recorded in the office of the district recorder or in the records of the Bureau of Land Management; or

occur to the final drawings during construction. If combined with Specifications, they are referred to as Record Documents. The Contractor is required to record changes to the final drawings resulting from Change Orders, Field, Orders, etc. by marking up the final drawings and then conveying them to the Owner. Some engineers leave the original stamp from the issuance of the drawings for construction on the record drawings along with the disclaimer that it was produced from contractor provided information. Record drawings should not have a new signed and dated stamp, unless the changes in construction have been directly overseen by the licensed professional.

As Built Surveys are prepared after construction to re-establish horizontal and vertical control points, locate structures and improvements, and show dimensions. Also referred to as Works-as-Executed by the Contractor, these documents do not always require stamping and signing. As Builts surveys that show improvements in relation to the property boundaries are required to be stamped and signed.

Mortgage Surveys, often erroneously called “As Builts”, show improvements and other site features relative to property boundaries. These documents always require stamping and signing.

Standard details are intended to be used in multiple projects with little or no change, and the appropriateness of their inclusion into a particular project is the responsibility of the engineer of record for that project. The registrant that initially designed the detail is responsible for including limitations of the detail’s application.

Specifications that accompany final drawings carry with them the stamping and signing of the various professionals from the final drawings and do not necessarily require further stamping and signing. For documents such as Soils Reports, other required reports, and stand-alone specifications not accompanied by plans, a signed and dated seal must be on the front page.

Shop Drawings and Field Drawings are prepared by contractors, subcontractors or vendors to show how a particular aspect of the work is to be fabricated and installed. Shop and field drawings are not contract documents and are not prepared by a design professional. These drawings demonstrate how an aspect of the work will satisfy the contract documents by completing the information cycle between drawings prepared by licensed professionals and the actual construction. Shop and Field drawings do not require a seal, signature and date unless an Alaska Registered Professional prepares them.

For more information, please refer to AS 08.48.221 and 12 AAC 36.185.

(3) evidence that by reasonable analysis might result in alternate positions or boundaries from those of record.

Site Adaptation & Field Alterations of Sealed Documents

Except as specified in 12 AAC 36.195, a person may not alter or contribute to the altering of any document that has been sealed by a registrant authorized under AS 08.48. In Alaska, a registrant may site adapt or field alter sealed documents prepared by another registrant of the same discipline if the registrant

1. has written permission
 - a. to adapt or alter the sealed documents from the registrant who sealed the original sealed documents; or
 - b. from the legal owner of the original sealed documents; the legal owner of the original sealed documents must have written proof of ownership of the sealed documents from the registrant who sealed the documents;
2. reviews the sealed documents and makes all necessary revisions to bring the sealed documents into compliance with applicable codes, regulations, and job-specific requirements;
3. affixes to the calculations of the
 - a. site adapted documents a sealed certification, "I certify that I have reviewed the relevant calculations for the site adapted documents in accordance with 12 AAC 36.185," or the registrant shall independently prepare and seal all calculations for the site adapted documents; or
 - b. field altered documents a sealed certification, "I certify that I have reviewed the relevant calculations for field altered documents in accordance with 12 AAC 36.185 and that the alterations will have no significant effect on other design considerations of the originally sealed documents," or the registrant shall independently prepare and seal all additional calculations for field adapted documents;
4. reissues the sealed documents after review with the title block and seal of the registrant performing the site adaptation, or in the case of field altered documents have provided additional sealed drawings with the title block and seal of the registrant performing the work; and
5. maintains professional control over the use of the site-adapted or field altered sealed documents as if they were any other original sealed documents of the registrant and maintains the sealed documents on file.

AELS CONTACT INFORMATION

For further information or assistance concerning AELS Board requirements, contact the AELS Board or the Division of Corporation, Business and Professional Licensing:

AELS Board

JUNEAU OFFICE

Division of Corporation, Business and Professional Licensing
333 Willoughby Ave., 9th Floor*
Juneau, AK 99811-0806
P: 907.465.1676 (Executive Administrator)
907.465.2540 (Licensing Examiner)
F: 907.465.2974

ANCHORAGE OFFICE

Division of Corporations, Business and Professional Licensing
550 West 7th Avenue, Suite 1500
Anchorage, AK 99501
P: 907.269.8160 (Investigator)
F: 907.269.8156

****No US mail delivery to physical address. For USPS use:***

State of Alaska/ DCCED
Division of Corporation, Business and Professional Licensing
AELS Board
P.O. Box 110806
Juneau, AK 99811-0806

Board & Division Web Addresses:

AELS Board Homepage:

[ProfessionalLicense.Alaska.gov/BoardofArchitectsEngineersandLandSurveyors.aspx](https://www.commerce.alaska.gov/BoardofArchitectsEngineersandLandSurveyors.aspx)

AELS Statutes and Regulations

<https://www.commerce.alaska.gov/web/Portals/5/pub/aelsstatutesregs.pdf>

Registration status for individual professionals and firms may be checked by querying the Division database at: <https://www.commerce.alaska.gov/CBP/Main/>

AELS FAQs:

<https://www.commerce.alaska.gov/web/cbpl/ProfessionalLicensing/BoardofArchitectsEngineersandLandSurveyors/FAQs.aspx>

Reporting Potential Violations

To report a potential violation or submit a complaint, contact the AELS Investigator in the Anchorage Office (contact information provided above). Please be aware anonymous complaints are NOT accepted or investigated.

STATE FIRE MARSHAL'S OFFICE

The State Fire Marshal is an Alaska state building official who conducts plan reviews for all construction outside of exempted occupancies that have been granted deferrals. The State Fire Marshal adopts building codes as authorized by AS 18.70 and defined by 13 AAC 50.55.

State Fire Marshal's Office
State of Alaska
Department of Public Safety/ Division of Fire and Life Safety
5700 E. Tudor Road
Anchorage, AK 99507-1225
P: 907-269-5491
F: 907-338-4375

BUILDING OFFICIALS AND PERMITTING CONTACTS

Municipality of Anchorage

4700 S. Bragaw St.
Anchorage, AK 99507
Phone: (907) 343-8301
<https://www.muni.org/pages/default.aspx>

City of Kenai

210 Fidalgo Ave, Suite 200
Kenai, AK 99611
(907) 283-7353
<http://www.ci.kenai.ak.us/>

City of Soldotna

177 N. Birch St.
Soldotna, AK 99669
(907) 262-9107
<https://soldotna.org/>

City of Homer

3575 Heath St.
Homer, AK 99603
(907) 235-3170
<http://www.cityofhomer-ak.gov/>

City of Whittier

P.O. Box 608
Whittier, AK 99693
(907) 472-2340
<http://www.cityofwhittier.org/>

City of Unalaska

P.O. Box 610
Unalaska, AK 99692
(907) 581-1260
<http://ci.unalaska.ak.us/>

City of Fairbanks

800 Cushman St.
Fairbanks, AK 99701
Phone: (907) 459-6720
<http://www.fairbanksalaska.us/>

City of Kodiak

710 Mill Bay Rd.RM. 208
Kodiak, AK 99615
(907) 486-8070
<http://www.city.kodiak.ak.us/>

City of Sitka

100 Lincoln St.
Sitka, AK 99835
(907) 747-1807
<http://www.cityofsitka.com/>

City of Valdez

P.O. Box 307
Valdez, AK 99686
(907) 835-4313
<http://www.ci.valdez.ak.us/>

City of Palmer

645 E. Cope Industrial Way
Palmer, AK 99645
(907) 745-2371
<http://www.cityofpalmer.org/>

Kenai Peninsula Borough

144. N. Binkley Street
Soldotna, AK 99669
(907) 262-4441
<http://www.kpb.us/>

City of Juneau

155. S. Seward Street
Juneau, AK 99801
(907) 586-0770
<http://www.juneau.org/>

City of Seward

P.O. Box 1397
Seward, AK 99644
(907) 224-4071
<http://www.cityofseward.us/>

City of Ketchikan

2930 Tongass Ave.
Ketchikan, AK 99901
(907) 228-4737
<http://www.ktn-ak.us/>
(907) 262-4441
<http://www.kpb.us/>

City of Cordova

P.O. Box 1210
Cordova, AK 99574
(907) 424-6200
<http://www.cityofcordova.net/>

City of North Pole

125 Snowman Lane
North Pole, AK 99705
(907) 488-2281
<http://www.northpolealaska.com/>

City of Wasilla

290 East Herning Ave.
Wasilla, AK 99654-7091
(907) 373-9020
<http://www.cityofwasilla.com/>

City and Borough of Wrangell

P.O. Box 531
Wrangell, AK 99929
907-874-2381

<http://www.wrangell.com>

Borough of Petersburg

12 South Nordic Drive
Petersburg, AK 99833 907-772-
(907) 772.4425
<https://www.ci.petersburg.ak.us/>



Kean & Associates

14384 Canyon Road, Anchorage, AK 99516, Email: kean@acsalaska.net
Ph: (907) 345-2098, Fax: (907) 345-2097

August 10, 2020

Board of Architects, Engineers, and Land Surveyors
PO Box 110806,
Juneau, AK 99811

RECEIVED
Juneau

AUG 12 2020

CBPL

To Whom It May Concern:

I accidentally let my Professional Land Survey license expire. Thinking it was due to be renewed next year, 2021, I did not acquire the professional credits needed. My attempts to find useful classes to attend have been frustrated by the Corona19 virus pandemic and I am looking for online classes to attend, but in the meantime I have clients that need their work stamped and moved forward. Per this letter I am requesting relief from this requirement for this license period.

In support of my qualifications, I taught Boundary Law at the Geomatics Department at UAA for 5 years and was instrumental in writing the Act that allowed the resolution for Manifestly Defective Surveys (Rabbit Creek Subdivision). I have held my license since 1980 and completed thousands of jobs, with no complaints on record.

Sincerely,

Robert T. Kean PLS 3943S

State Board of Registration for Architects, Engineers, and Land Surveyors

	Appointed	Reappointed	Expires
Jennifer Anderson <i>Civil Engineer</i>	03/01/2018		03/01/2022
Robert (Bob) Bell <i>Land Surveyor</i>	03/01/2020		03/01/2024
Catherine Fritz - Secretary <i>Architect</i>	03/01/2016	03/01/2020	03/01/2024
Jeff Garness <i>Engineer Other Than Those Listed</i>	03/01/2020		03/01/2024
Elizabeth Johnston – Vice-Chair <i>Electrical/Mechanical Engineer</i>	03/01/2017		03/01/2021
John Kerr – Chair <i>Land Surveyor</i>	03/01/2013	03/01/2017	03/01/2021
Jeff Koonce <i>Architect</i>	03/01/2013	03/01/2017	03/01/2021
Loren Leman <i>Civil Engineer</i>	03/01/2020		03/01/2024
Luanne Urfer <i>Landscape Architect</i>	07/01/2013	07/07/2017	03/01/2021
Fred Wallis <i>Mining Engineer</i>	03/01/2016	03/01/2020	03/01/2024
Vacant <i>Public Member</i>			03/01/2022

VI. Effective Regulations

This section is intended to provide you with a general overview of the regulations process. It is not legal guidance; the applicable statutes control. Any legal questions should be addressed to the Department of Law.

Regulations must be based on statutory authority. Within the division, regulations typically clarify the requirements of the occupational licensing program as set forth by the Alaska State Legislature in statute. As mentioned in the beginning of this manual, statutes are state laws that authorize and set out the scope of a board or commission's governance authority of a licensing program. Statutes may also authorize and direct the division's management role in all licensing programs overseen by the division. Where statutes assign to a board the responsibility of adopting regulations, that board must follow the process set forth in the Administrative Procedure Act (APA) (AS 44.62.010–44.62.305) unless the legislature has by statute directed a board or commission to follow another process. The APA's requirements are explained in detail in the *Drafting Manual for Administrative Regulations*. The Drafting Manual is at http://law.alaska.gov/doclibrary/drafting_manual.html.

State agencies subject to the APA must follow the statutory procedures in order to adopt, amend, or repeal a regulation. A significant step in the APA requires that the public receive notice of a proposed regulation and an opportunity to comment on a proposed regulatory action. This ensures that the public and interested parties—predominantly licensees and prospective licensees—are aware of the proposed changes affecting their programs and provides adequate opportunity to comment on them. By ensuring public notice and ability to comment, the APA's procedures support the public's vital role in the regulations process.

Overview of the Regulations Process

When a board identifies the need to propose a regulation to implement, interpret or make specific a state statute, the board, it should begin organizing its collective thoughts on the matter, at a publicly noticed meeting. If the subject matter is highly technical or complex, it may be helpful for the board to form a working group from among its members. That group may engage in fact-finding outside of public meetings, for the purpose of sharing its findings with the entire board at an appropriate meeting.

The maker of the motion to propose amendment, adoption, or repeal of regulations should provide the board with a written draft of the proposal. It is the board's responsibility to be certain that the record reflects what the board intended. This means that the board should articulate what it is hoping to accomplish with the project, and it should carefully review written drafts, to ensure that the language conveys what the board intended. It is the board's job to provide at least the initial draft of language for a proposed regulation or amendment to regulation. Some boards find it helpful to request assistance from their staff, executive director, and the department's regulations specialist.

Under the APA, the public must have a minimum of 30 days to comment (either orally or in writing, or both) on proposed regulations. During the comment period, the staff must publish on the website answers to questions from the public on the proposed regulations received in writing unless the questions are received within 10 days before the close of the comment period; in that case the staff may, but is not required to, answer the questions. The board will meet either telephonically or in person after this period closes to review written comments and amend or adopt the proposal. A board may also notice a meeting at which oral testimony may be heard on the proposal.

If the board chooses to substantially amend its proposal, it must go out for another 30-day public comment period. Whether the amendments to the proposed regulations would require a new notice and comment period should be reviewed by the Department of Law. If the changes are minor and do not alter the meaning of the regulations, it may then be forwarded for review by the Department of Law.

The Department of Law will assign an agency attorney who is familiar with licensing issues to review the proposal for content. Once the agency attorney review is complete, either the regulations attorney or the assistant regulations attorney will review for legality, consistency with other provisions of law and conformance to the state's drafting style. If there are questions, the regulations attorneys will contact the agency attorney. Once the regulations have been approved by the regulations attorney in the Department of Law, the regulations are transmitted to the Office of the Lieutenant Governor for filing. Once signed by the Lieutenant Governor or the Lieutenant Governor's designee, his/her designee, the regulation will become effective in 30 days *unless* another effective date is specified in the adoption order or certification of adoption.

A typical board or commission regulations process can take 90-180 days, depending on the workload of the division Regulations Specialist, the complexity of the project, and scheduling a review with the Department of Law.

Due to Alaska's small population, Board members may be easily accessible to their licensees and public stakeholders. Board members must remember that comments on proposed regulations must be received as requested in the notice of proposed regulations. Comments may only be received on proposed regulations by -

Written comments that are received by the division Regulations Specialist during the public comment period as set out in the notice of proposed regulations, oral comments that are received by the board during the public comment period noticed on the state Online Public Notice System

Board members may not receive comments directly via email, text, in the grocery store, at the lodge, in the hair salon, or on the golf course. When well-meaning members of the public offers input, thank them for their interest but remind them that you are only one of several board members and the board can only act as one; therefore, they should submit their comment as directed in the public notice.

The Division Director may also draft and notice regulations through the same process, though there may not be a public meeting to deliberate or adopt final regulations. The same public notice provisions apply, and the Director must consider all written comments received. When setting fees for licensing programs, the Director will seek board input on proposed fees as required in AS 08.01.065. The Director may adopt regulations that pertain to all licensing programs in general (known as Centralized Regulations) and may adopt regulations that direct the licensing programs in AS 08.01 that do not have a governing board or commission.

Where to Seek Help

The division Regulations Specialist II is trained to assist in drafting regulations and moving them through the adoption process. The Division Director, Division Operations Manager, or Executive Administrator should also be able to walk the board through the process of adopting regulations. They may also request attorney advice independently or on behalf of the board. The flow charts that follow should clarify the processes of board and division regulation adoption, though the process is ultimately administered by the Department of Law.

Is It A Regulation Or Policy?

REGULATIONS

- Anything that affects the public or is used by the agency in dealing with the public;
- Have the force and effect of law;
- Licensees must follow them;
- Prospective licensees must comply with them in order to be licensed;
- Can only be created by following the process outlined in the Administrative Procedure Act – AS 44.62;
- This process can be time-consuming, taking months or years. It involves at a minimum:
 - 30-day public notice,
 - Review by Department of Law, and,
 - Can't be changed, except by formal process.

POLICIES, ADVISORIES, AND GUIDELINES

- Anything a regulatory boards says that:
 - Sets out the regulatory board's expectations in general, nonbinding terms,
 - Does not have the force and effect of law.
- Disciplinary Matrix is a *guideline* if it is used as a reference point, along with:

- Careful consideration of facts and circumstances, as well as,
- Underlying goals of the statute and purpose for the discipline.
- Disciplinary Matrix is a *regulation* if it is used:
 - As a formula: *"If licensee did X, then disciplinary response = Y."*
 - To achieve or demonstrate consistency by showing how the board will respond in every case where certain facts are present: *"All licensees who do X get Y."*

GENERAL PRINCIPLES APPLICABLE TO BOTH REGULATIONS AND POLICIES

- Clarity
 - If it affects licensees or the public, it should be available and understandable. *Ex.:* if the board keeps a list of activities that it will approve as uncompensated professional activities under 12 AAC 44 620((a)(2)(E), the list should be accessible on the board's website.
- Consistency
 - With other communications about similar facts;
 - With the governing statute's purpose.
 - Proportionality
 - License denials and disciplinary actions including suspension, revocations, and fines should be consistent with the statute's goals.

Steps in the Board Regulation Adoption Process

Day 1	1 At an open meeting, the board votes on language to change regulations. This motion is forwarded to the Division Regulations Specialist for drafting.	Day 65	7 Division Regulations Specialist compiles answers to questions and posts FAQ on the program web page.	<i>Once Regulations Are Effective</i>
Day 30	2 Once drafting is complete, the board holds another public meeting to edit or approve draft for public notice.	Day 75	8 Regulations Specialist compiles public comments for distribution to board.	
	3 Approved language is reviewed by Division attorney.	Day 90	9 Board holds an open meeting to review public comments, make minor changes, and adopt regulations. Substantive changes may require additional drafting and public notice (Step 2).	
	4 Department of Law opens file.		10 Division submits final regulation package to Department of Law for review and approval, and to the Governor's office.	
Day 45	5 Division publishes and distributes public notice, additional regulation notice information, and proposed regulation to all licensees and interested parties. Public notice posted in newspaper and on Alaska Online Public Notice System		11 Agency attorney reviews regulation	
	6 Public comment period and/or hearing (if applicable).		12 Regulations attorney reviews and either approves or disapproves regulation	14a Agency posts summary on Alaska Online Public Notice System
		Day 110	13 Unless returned by the Governor, Lt. Governor's office files approved regulation; regulations become effective in 30 days	14b Regulation published in Alaska Administrative Code
		Day 150		14c Forms & FAQ updated on program web page

All timeframes are estimated, dependent upon staff and attorney workflow and board scheduling.

Steps in the Board Regulation Adoption Process

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		Day 150		

All timeframes are estimated, dependent upon staff and attorney workflow and board scheduling.

Steps in the Regulation Process for a Board and Commission (board)¹

Beginning the Process

1. At an open meeting, the board initiates and votes on proposed regulation changes.
2. **Reason:** Identify the reason for the proposed action, such as compliance with new or changed state law. If applicable, identify the law, order, decision, or other action of the federal government, or federal or state court, if that is the basis for the proposed action. The description need only be a sentence or two.
3. **Cost information:** In the meeting minutes there must be estimated costs in the aggregate to comply with the proposed action to:
 - A private person
 - Another state agency
 - A municipality

Cost information is described simply as an estimate of annual costs within the board's ability to determine due to its familiarity with the regulated community.

Example: The Board of Chiropractic Examiners is proposing to add three CE credits to their continuing competency requirements for a biennial license renewal. The proposal may cost

- A private person: \$50 per applicant/licensee
 - Another state agency: None known
 - A municipality: None known
4. Within 10 days of the meeting, board staff must transmit board minutes² or an excerpt of the minutes, draft language or proposals, and a completed Regulations FAQ Worksheet for the proposed regulation changes requested by the board to the Regulations Specialist.

What comes next: Regulations Specialist

5. The Regulations Specialist determines if there is authority in statute to adopt the proposed regulation changes.
6. The Regulations Specialist prepares a draft of regulation changes, using the Department of Law's *Drafting Manual for Administrative Regulations* for conformity and style, and works with board staff before submitting the final draft to the board for review/approval. In some instances the draft regulation changes will be reviewed by an AAG before the final draft is submitted to the board for review/approval.
7. Once completed, the draft proposed regulation changes are presented to the board at its next public meeting to review and approve the final draft, amends if needed, and requests that the approved draft be finalized and public noticed.

Public Notice

8. NOTE: The board must **always** provide an opportunity for submission of written comments in the regulation-adoption process. Also, the board should determine if it wants to hold a public hearing on the proposed regulation changes at its next meeting. If it does, the location, date and time of the hearing needs to be included in the public notice. Public hearings are usually held in conjunction with a regularly-scheduled meeting of the board and are always recorded. Oral public hearing is optional; however, answering the following questions will help the board determine if an oral public hearing is needed:
 - Are the regulations controversial and is there likely to be substantial public interest in them?
 - Would those most affected by the regulations be better able to participate if an oral hearing were held?
 - Would the board benefit from a face-to-face or teleconferenced opportunity to receive comments on the proposed regulations from interested persons?
9. Regulations Specialist sends notice to Alaska Dispatch News (or other newspapers if warranted) for publication, all interested parties, and licensees, if warranted. The Regulations Specialist posts the notice on the Alaska Online Public Notice System, electronically transmits a copy of the notice and proposed regulation changes to all incumbent legislators and the Legislative Affairs Agency, House & Senate Labor & Commerce Committees, Legislative Council, Lt. Governor, Governor, and Department of Law (Law). It is also emailed to board members and affected staff, including the commissioner's office. Public notice will be posted on the board's webpage.

Comment Period

10. The Regulations Specialist or board staff shall make a good faith effort to answer relevant questions received at least 10 days before the end of the public comment period. Questions must be in writing or asked at the legally noticed public meeting. The Regulations Specialist or board staff shall answer questions in writing and make the questions and answers available on the Alaska Online Public Notice System and the board's webpage. FAQs will be posted on the board's webpage and updated when relevant questions are answered. The Regulations Specialist or board staff may, but are not required to, answer written questions received after the 10-day cutoff date.
11. After the comment deadline (at least 30 days in duration), comments received on proposed regulation changes are compiled and copied by the Regulations Specialist and given to board staff to include in the board packets for the next open board meeting to be considered prior to adopting. Comments received after the deadline should not be forwarded to the board and comments should not be taken at the board meeting from the public prior to adoption unless a hearing was noticed and the comments are heard by the board during the comment period.

Adoption

12. The board's options regarding the proposed regulation changes at its next meeting are:

- a. It can adopt the proposed regulation changes as written/publicly noticed, amend, and adopt them; or
 - b. Choose to take no action on them.
 - c. Substantive changes may require additional drafting and public notice (**see** Step 7 above).
- 13. When making a motion to adopt the regulations, the board is required to state on the record that it has reviewed any comments received, and considered the cost to private persons of the regulatory action being taken.
- 14. When regulation changes are adopted:
 - a. The chair signs the adoption/certification order; and
 - b. The board staff signs an affidavit of board action and/or affidavit of oral hearing (if applicable) and attaches it to the relevant minutes or an excerpt of the minutes and forwards to the Regulations Specialist.

Finalizing the regulation change process

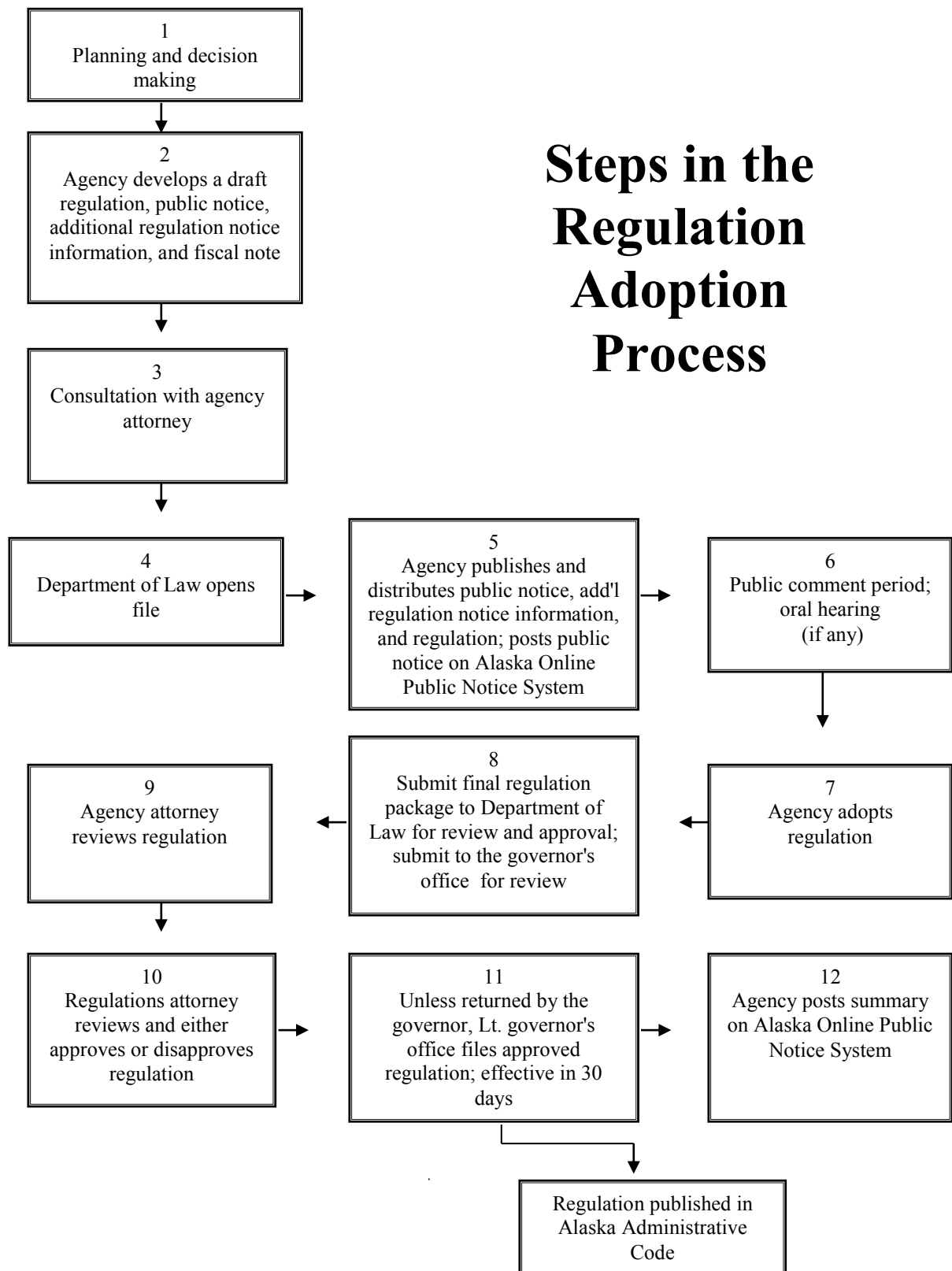
- 15. Regulations Specialist prepares the final regulation package for transmittal to Department of Law for final review/approval, which includes the adopted regulations, certain affidavits, and other appropriate documents.
- 16. Assigned agency attorney reviews the regulations.
- 17. Regulations attorney reviews and either approves or disapproves regulation changes. Law reviews and will occasionally make edits. (On rare occasions, this may require the edited version to be re-adopted by the board at a subsequent meeting.) At the same time, the adopted regulations are submitted to the governor for review. The governor has 30 days to review the regulations under AS 44.62.040(c), and return the regulation for specified reasons.
- 18. Unless returned by the governor, when the governor and Law's review are complete, the adopted regulations are forwarded to the Lt. Governor for filing. Regulation changes are effective 30 days after filing unless a later effective date is specified in the adoption order.

Once regulations are effective

- 19. Agency posts summary of approved regulation changes on Alaska Online Public Notice System.
- 20. Agency updates statutes and regulations board webpage.
- 21. Regulation published in Alaska Administrative Code.

¹ The process may take six months to a year or longer to complete. It may be expedited if a board meets often or holds a teleconference following the written comment period to adopt the final regulations. Department of Law workload also plays a big part in the timeframe.

² Board minutes reflecting concisely what the project entails plays an important part in getting a project rolling. This is true for the initial stages and the final motion adopting the regulations following the public comment period due to the relevant minutes or an excerpt of the minutes being forwarded to the Department of Law with the final project.



(2) If that engineer is providing a reference letter, certifying that the registration of that engineer is current.

(h) In addition to meeting the requirements of (b)(1) of this section, an applicant for structural engineering registration by comity must have passed an NCEES Principles and Practices of Engineering Examination and the

-22-

*12 AAC 36.105 - AK's current SE
by comity regulation*

16-hour NCEES Structural Engineering Examination and have six years of experience with a bachelor's degree or five years of experience with a master's degree. Applicants who have passed the NCEES Structural Engineering Examination, NCEES Structural Engineer II Examination, or both may be granted a civil engineering registration.

187

**BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS**

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FREQUENTLY ASKED QUESTIONS (FAQs) REGARDING THE STRUCTURAL ENGINEER (SE) EXAM

1) What is the Structural Engineer (SE) licensure application process, when is the exam offered, and what exam will I take if my application is approved?

The [exam schedule](#) and information regarding the [application process](#) is located on the Board's website. Detailed information regarding the exam is available on the [NCEES website](#).

Applicants applying for SE licensure will take the National Council of Examiners for Engineering and Surveying (NCEES) 16-hour SE exam. The NCEES 16-hour SE exam was offered for the first time in April 2011, and is the only SE exam currently administered by NCEES. The exam replaced the separate NCEES SE I and II exams.

2) What is the format of the NCEES 16-hour SE exam?

The NCEES 16-hour SE exam is a breadth and depth exam offered in two 8-hour components, administered on consecutive days. Applicants **must** receive a passing score on both 8-hour components of the exam within a 5-year period in order to pass the SE exam. Applicants do not need to take both 8-hour portions of the NCEES 16-hour SE exam during the same exam administration.

The 8-hour Vertical Forces (Gravity/Other) and Incidental Lateral component focuses on gravity loads and lateral earth pressures. The 8-hour Lateral Forces (Wind/Earthquake) component focuses on wind/earthquake loads.

Detailed information regarding the exam is available on the [NCEES website](#).

3) I do not have a California Civil PE license. Am I required to have a California Civil PE license to apply for a SE license in California?

Yes. Title 16, California Code of Regulations section 426.10 requires that an SE applicant hold a valid, unexpired Civil Engineer license in California. You can view the pertinent code section [here](#). To check to see if you qualify for licensure you may also view the flowchart located [here](#).

4) What are the exam requirements to become licensed as a SE in California?

You must meet or have met one of the following exam scenarios:

- Pass the NCEES 16-hour SE exam (**exam currently offered by NCEES**);
Or
- Passed the NCEES SE II exam and California SE Seismic exam (CSESE) (**exams no longer offered**);
Or
- Passed the NCEES SE II exam and Washington State SE III exam (**exams no longer offered**).

5) I passed the NCEES SE II exam in the past, but not the California SE Seismic exam (CSESE). Can I get credit for passing the NCEES SE II exam?

No. The NCEES SE II exam was part of the previous requirements for licensure as a SE in California and was used only in conjunction with the CSESE. The CSESE was discontinued after the October 2011 exam administration. You need to pass the NCEES 16-hour SE exam to become licensed as a SE.

6) I passed the CSESE in the past, but I did not pass the NCEES SE II exam. Can I use my CSESE as credit for an 8-hour portion of the NCEES 16-hour SE exam?

No. You need to pass both components of the NCEES 16-hour SE exam.

7) I have taken and passed the NCEES SE II and the Washington State SE III. Are these exams accepted for SE licensure in California?

Yes, these two exams are accepted for comity licensure as a SE in California.

8) I have taken and passed the 8-hour NCEES SE I exam and the 8-hour NCEES SE II exam. Are these two exams accepted instead of the NCEES 16-hour SE exam since together they equal 16-hours?

No. The NCEES SE I exam is considered a principles and practice level exam for initial licensure as a Professional Engineer.

The SE license is considered a mastery-level license and is tested at the mastery-level. The NCEES 16-hour SE exam is considered a mastery-level exam.

From: [John B. Kerr](#)
To: [Powers, Rebecca J \(CED\)](#)
Cc: [Neal, Sara J \(CED\)](#)
Subject: FW: SE by Comity
Date: Friday, August 14, 2020 10:43:49 AM
Attachments: [email_logo_small.png](#)
[facebook-logo.png](#)
[instagram-logo.png](#)

Info to help us track down info on SE Reg change discussion
John Kerr, PLS
www.SurvBase, LLC
c. 907.529.5959

From: Colin Maynard <cmaynard@bbfm.com>
Sent: Friday, August 14, 2020 9:37 AM
To: John B. Kerr <John.Kerr@survbase.com>
Subject: Re: SE by Comity

John:

The possible exam alternates that I believe that I shared are:

1. NCEES 16-hour Structural exam, or
2. NCEES Structural II and Washington or California Structural III exams passed between 2003 and 2011, or
3. NCEES Structural I and NCEES Structural II passed between 1986 and 2005*, or
4. Western States 16-hour Structural exam passed between 1952 and 2003**

* California does not allow this path

** Washington cuts this off in 1998, Oregon in 2003

Hope this helps. I don't recall when this was discussed, as I believe it was discussed a couple times over the past two years.

Colin

On 8/13/2020 10:28 PM, John B. Kerr wrote:

Thanks for the info Colin,
Was there draft updated language developed for the SE by Comity reg?
The latest discussion that Rebecca Powers has uncovered is from a ?January 2020 email? stating:

B. Review of potential updates to 12 AAC 36

Jones suggested that the Board look closer at the wording of the mentor regulations.

The current language requires 4 years of responsible charge under the mentorship program which is more rigorous than the 2 years of responsible charge required for those not in the mentorship program. Maynard suggested changing the mentor program language to say that 2 years of responsible charge under a PE are required.

Maynard brought up the need to change 12 AAC 36.105(h) which currently only allows SE licensure for those who have taken the PE and SE-16-hour exam. To not have a barrier for SE licensure it should allow for the option of the PE and SE I and II as well.

If you know of draft or board considered language to address this revision would you please forward it and let me know approximately when this would have been discussed by the board (if it was).

Thanks much,

John
John Kerr, PLS
[www.SurvBase](http://www.SurvBase.com), LLC
c. 907.529.5959

From: cmaynard@bbfm.com <cmaynard@bbfm.com>

Sent: Monday, August 10, 2020 9:30 PM

To: John B. Kerr <John.Kerr@survbase.com>

Subject: Re: SE by Comity

John:

The current comity regulation requires the NCEES 16-hour exam. There is a regulation change that would allow people licensed prior to the start of the NCEES 16-hour exam to be licensed by having passed one of several earlier 16-hour exams. However, it has not been public noticed or passed as of this time.

Colin

--

Colin Maynard, PE, SE F.NSPE, M. ASCE | Principal



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Due to the COVID-19 pandemic and associated CDC and government guidelines, our office is closed to the public. All meetings are being performed electronically. BBFM Staff is working from home to the extent possible with office phone lines forwarded to personal phones in most cases. Please call direct lines or use our company directory to reach staff directly.

NCEES revising structural engineering exam

NCEES will introduce a new 16-hour Structural Engineering exam in April 2011. The exam will replace the current Structural I and Structural II exams, which will be administered for the last time in October 2010.

NCEES Director of Exam Services Tim Miller, P.E., explained the need for the revision: “NCEES currently offers two 8-hour structural exams, and some licensing boards also use state-specific exams. NCEES wanted to provide one exam that could be used by any state requiring specialized structural licensure, even a state with high-seismic activity.”

To develop the new exam, NCEES surveyed licensed structural engineers from across the United States to find out what knowledge areas are most relevant to current professional practice. NCEES brought together representatives from state licensing boards and national structural engineering organizations to analyze the survey results and set the specifications, or content areas, for the new exam.

Miller is confident that the exam will be an effective measure of minimal competence for any state. “We’ve gone through a deliberate and rigorous process to develop the specifications, and the state boards that currently license structural engineers have been included in this process,” he said.

The new 16-hour Structural Engineering exam is divided into two 8-hour components, which will be offered on successive days. The Vertical Forces component focuses on gravity loads and incidental lateral loads. The Lateral Forces component focuses on wind and earthquake loads.

Each component of the exam has a breadth module that contains questions covering a comprehensive range of structural engineering topics. Each component also has a depth module that focuses more closely on a single area of practice. Examinees will choose whether they want to concentrate on buildings or bridges for this module.

To pass the exam, examinees must receive acceptable results on both the Vertical Forces and Lateral Forces components, but these components may be taken during different exam administrations.

The specifications for the new exam are posted on the NCEES Web site. NCEES will also publish a book of sample questions and solutions in 2010 to familiarize examinees with the new exam’s format and content areas.

“The changeover is still two years away, but it’s an important transition,” Miller said. “We want to give people as much advance notice as possible.”

Contact: Bruce Martin, P.E., Exam Development Engineer

Revised February 15, 2010

Posted on March 25, 2009 at 11:43 a.m.

**Chapter 36. State Board of Registration for Architects,
Engineers, and Land Surveyors.**

(Words in **boldface and underlined** indicate language being added; words [CAPITALIZED AND BRACKETED] indicate language being deleted. Complete new sections are not in boldface or underlined.)

12 AAC 36.010(a) is amended to read:

(a) An application for examination or for registration by comity must be **legible** [TYPEWRITTEN] and filed with the board on a form prescribed by the board, accompanied by the application fee established in 12 AAC 02.110.

12 AAC 36.010(c)(3) is amended to read:

(3) all supporting documents have been **verified** [RECEIVED] by the board [VERIFYING] that the applicant meets the registration requirements in AS 08.48 and this chapter.

12 AAC 36.010(f) is amended to read:

(f) Except as provided in 12 AAC 36.060(a), the board will determine that an application is incomplete, and will notify the applicant, if the

[(1)] board is not able to determine from the application form and supporting documents whether the applicant meets the registration requirements in AS 08.48 and this chapter [; OR

(2) APPLICATION FORM DOES NOT SHOW THAT THE APPLICANT MEETS THE REGISTRATION REQUIREMENTS IN AS 08.48 AND THIS CHAPTER BUT THE BOARD DETERMINES THAT THE APPLICANT WILL LIKELY MEET THE QUALIFICATIONS WITHIN ONE YEAR].

Register 116; am 5/12/96, Register 138; am 3/8/2001, Register 157; am 10/29/2009, Register 192; am ____/____/_____, Register _____)

Authority: AS 08.01.050 AS 08.48.171 AS 08.48.201
AS 08.48.101 AS 08.48.191

12 AAC is amended by relocating 12 AAC 36.070 to 12 AAC 36.045, and is amended to read:

12 AAC 36.045. Postponements. The board will grant up to two postponements to an applicant who is scheduled to take the Alaska Land Surveying Examination (AKLS) [OR LANDSCAPE ARCHITECT REGISTRATION EXAMINATION (LARE)] if the applicant's request for postponement is filed with the board not later than 30 days immediately following the date of the examination. An applicant who does not appear for an examination and does not qualify for a postponement is not eligible for a refund of the examination fee and shall meet the reexamination application requirements in 12 AAC 36.040 to be scheduled for a later examination. (Eff. 5/23/74, Register 50; am 9/30/78, Register 67; am 3/16/96, Register 137; am 10/14/2006, Register 180; am ____/____/_____, Register _____)

Authority: AS 08.48.101

Editor's note: 12 AAC 36.045 formerly appeared as 12 AAC 36.070.

12 AAC 36.050(f) is repealed:

(f) **Repealed** ____/____/____ [AN APPLICATION FOR REGISTRATION UPON EXAMINATION AS A PROFESSIONAL LANDSCAPE ARCHITECT MUST BE RECEIVED BY THE DEPARTMENT IN THE JUNEAU OFFICE AT LEAST 30 DAYS BEFORE THE QUARTERLY MEETINGS OF THE BOARD HELD IN FEBRUARY AND AUGUST, RESPECTIVELY, IN ORDER TO REVIEW THE APPLICANT'S QUALIFICATIONS

BEFORE THE LANDSCAPE ARCHITECTURAL REGISTRATION EXAMINATION

(LARE) DATES IN JUNE AND DECEMBER]. (Eff. 5/23/74, Register 50; am 8/10/80, Register 75; am 8/13/87, Register 103; am 10/20/90, Register 116; am 5/12/96, Register 138; am 11/13/99, Register 152; am 1/20/2002, Register 161; am 10/14/2006, Register 180; am 5/4/2013, Register 206; am 8/7/2016, Register 219; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.181

12 AAC 36.061(b)(1) is amended to read:

(1) an NCARB ["] Council Record, [WITH APPLICATION FOR JURISDICTION REGISTRATION WITH COUNCIL CERTIFICATION,"] if the applicant is applying for registration by examination; or

(Eff. 11/13/99, Register 152; am 3/8/2001, Register 157; am 1/20/2002, Register 161; am 6/13/2003, Register 166; am 6/11/2005, Register 174; am 9/8/2006, Register 179; am 2/9/2007, Register 181; am 7/12/2008, Register 187; am 7/13/2011, Register 199; am 5/25/2017, Register 222; am 3/28/2019, Register 229; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.171

Editor's note: The NCARB publication *NCARB Education Guidelines*, adopted by reference in 12 AAC 36.061(a)(2), may be obtained from NCARB at (202) 879-0520, by writing to the National Council of Architectural Registration Boards, **1401 H Street** [1801 K STREET], N.W., Suite **500** [700K], Washington, D.C. **20005** [20006], or by requesting one online at <https://www.ncarb.org>.

12 AAC 36.063(a)(3) is repealed and readopted to read:

(3) submit to the board satisfactory evidence that the applicant's education or

work experience or both are equivalent to the requirements set out in the following table of education and work experience requirements for a professional engineering examination:

TABLE OF EDUCATION AND WORK EXPERIENCE

REQUIREMENTS FOR PROFESSIONAL ENGINEERING EXAMINATION

Description of Training	Equivalent Education in Years	Minimum Work Experience in Years	Total Years of Education and Work Experience
ABET accredited B.S. degree in 8 engineering in the branch of engineering applied for listed in 12 AAC 36.990(17), and a master's or doctorate in engineering acceptable to the board	5	3	
ABET accredited B.S. degree in engineering that is not in the branch of engineering applied for listed in 12 AAC 36.990(17), and a master's or doctorate in the branch of engineering applied for listed in 12 AAC 36.990(17) that is acceptable to the board	4	4	8
ABET accredited B.S. degree	4	4	8
Rev. 10/16/2020 Draft	4		

in engineering in the branch of
engineering applied for listed in
12 AAC 36.990(17)

ABET accredited B.S. degree in	3	5
8		

engineering technology in the
branch of engineering applied
for listed in 12 AAC 36.990(17)

ABET accredited B.S. degree in	3	5
8		

a branch of engineering that is
not the branch for which the
applicant has applied

Master's degree in engineering	2	6	8
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acceptable to the board in the
branch listed in 12 AAC 36.990(17)
for which the applicant has applied
or in a discipline substantially
similar to the branch for which the
applicant has applied

Doctorate degree in engineering	3	5
8		

acceptable to the board in the

branch listed in 12 AAC 36.990(17)
for which the applicant has applied
or in a discipline substantially similar
to the branch for which the applicant
has applied

Master's or doctorate degree in engineering acceptable to the board from a school which has an ABET accredited undergraduate engineering program in the branch for which the applicant has applied	3	5	8
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Non-ABET accredited B.S. degree in engineering in the branch applied for	3	6	9
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12 AAC 36.063(c) is amended to read:

(c) The minimum work experience required for registration must include

(1) two years of responsible charge experience or successful completion of a four-year [RESPONSIBLE CHARGE] mentoring **program** [SYSTEM], as defined in 12 AAC 36.990 and this section. To receive full credit for responsible charge experience, an applicant must gain responsible charge experience while under the responsible control of a professional engineer registered in the United States in the branch of engineering for which the applicant has applied. The board will determine the amount of credit given for responsible charge experience gained under the responsible control of a professional engineer registered in the United States in

another branch of engineering based on the comparability with the branch of engineering to which the applicant has applied;

(2) responsible charge experience **including** [OR] successful completion of four years [OF RESPONSIBLE CHARGE] obtained within a mentoring **program** [SYSTEM] will be considered for credit only if it is gained after the applicant has completed education or work experience or both that are equivalent to the requirements to be eligible for the fundamentals of engineering examination.

12 AAC 36.063(i) is repealed:

(i) **Repealed** / / _____ [NOTWITHSTANDING (a) - (h) OF THIS SECTION, AN APPLICANT AUTHORIZED BY THE BOARD TO TAKE THE EXAMINATION BEFORE 11/20/99, MAY CONTINUE TO QUALIFY FOR THE EXAMINATION UNDER 12 AAC 36.040].

The introductory language of 12 AAC 36.063(j) is amended to read:

(j) To meet the mentoring requirements of this section, an applicant must complete four years of quarterly face-to-face meetings **or video-conference** with a professional engineer registered in the United States and registered in the same discipline that the applicant is applying for. An applicant shall

• • •

(Eff. 9/30/78, Register 67; am 6/29/84, Register 90; am 8/13/87, Register 103; am 6/3/89, Register 110; am 3/16/96, Register 137; am 7/26/97, Register 143; am 8/26/98, Register 147; am 11/20/99, Register 152; am 3/8/2001, Register 157; am 6/13/2003, Register 166; am 7/22/2004, Register 171; am 9/11/2004, Register 171; am 10/29/2009, Register 192; am 9/9/2016, Register
Rev. 10/16/2020 Draft

219; am 5/25/2017, Register 222; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.171 AS 08.48.181

12 AAC 36.065(a)(2) is repealed and readopted to read:

(2) submit to the board satisfactory evidence that the applicant's education or work experience or both are equivalent to the requirements set out in the following table of education and work experience requirements for professional land surveyors; the board will evaluate the applicant's education and work experience that meet the requirements of AS 08.48 and this chapter and give credit as appropriate:

**TABLE OF EDUCATION AND WORK EXPERIENCE
REQUIREMENTS FOR PROFESSIONAL LAND SURVEYORS**

Classification	Education Credit Allowed In Years	Work Experience Credit Allowed In Years	Responsible Charge	
			Under R.L.S. In a Land Surveying Capacity In Years	Total Years of Education and Work Experience Required
Graduate of an ABET accredited or board approved curriculum with a B.S. degree in land surveying and a master's or doctorate degree in land surveying	5	3	3	8
Graduate of an ABET Rev. 10/16/2020 Draft	4	4 8	3	8

accredited land

surveying curriculum

4-year course

Graduate of a board	4	4	3	8
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approved land surveying

curriculum 4-year course

Graduate of 4-year	2	6	3	8
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degree with board

approved courses meeting

land surveying education

standard under (h) of this

section

The introductory language of 12 AAC 36.065(h) is amended to read:

(h) For the purpose of a four-year degree program with board approved courses under **(a)(2)** [(a)(2)(B)] of this section, course work must meet the following land surveying education standard:

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(Eff. 9/30/78, Register 67; am 2/22/81, Register 81; am 8/13/87, Register 103; am 6/3/89, Register 110; am 3/16/96, Register 137; am 7/26/97, Register 143; am 8/26/98, Register 147; am 11/13/99, Register 152; am 3/8/2001, Register 157; am 1/20/2002, Register 161; am 9/11/2004, Register 171; am 10/29/2009, Register 192; am 2/16/2012, Register 201; am 5/25/2017, Register 222; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.171 AS 08.48.181

12 AAC 36.066(a) is amended to read:

(a) In support of an application for examination or registration as a land surveyor, an applicant shall arrange for verification of the work experience [REQUIRED FOR ELIGIBILITY FOR THE FUNDAMENTALS OF LAND SURVEYING EXAMINATION AND] required in 12 AAC 36.065 to be submitted to the board. Verification of work experience must be on a form prescribed by the board and must be completed and submitted directly to the board by the employer who is verifying the applicant's experience.

12 AAC 36.066(d) is amended to read:

(d) A work verification form received for an individual will be reviewed by the board [OR THE DEPARTMENT] only after that individual submits an application for registration as a land surveyor. (Eff. 1/8/98, Register 145; am 5/25/2017, Register 222; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.171 AS 08.48.201

12 AAC 36.067 is amended to read:

12 AAC 36.067. Date of experience. Computation of qualifying experience for admission to the examination as an [ARCHITECT,] engineer, land surveyor, or landscape architect is up to the date of the examination **not to exceed three months. Responsible charge experience cannot be projected.** (Eff. 9/30/78, Register 67; am 11/13/99, Register 152; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.171

12 AAC 36.068(a) is amended to read:

(a) To be eligible for the professional landscape architect **registration** examination, **as required in 12 AAC 36.100(e)**, an applicant must submit

(1) a complete application on a form provided by the department; and

(2) except as provided in (c) and (i) of this section, satisfactory evidence that the applicant's education **and** [OR] work experience are equivalent to the requirements set out in the following table of education and work experience for professional landscape architect:

• • •

12 AAC 36.068(b) is amended by adding a new paragraph to read:

(3) the minimum work experience must include 24 months of responsible charge; the board will accept up to a maximum of two years of subprofessional work experience for up to one half of the work experience required for registration based on its meeting the definition of “subprofessional work” in 12 AAC 36.990.

12 AAC 36.068(g) is amended to read:

(g) On a form provided by the department, an applicant shall submit a report for each meeting under (f) of this section, including

(1) a description of the applicant's work experience **and topics** reviewed during the meeting;

(2) a statement indicating whether or not the work experience reviewed was **responsible charge experience, if it was** directly applicable to professional landscape architectural work and whether the work was performed according to industry standards; and

(3) the signature, **date**, and seal of the professional landscape architect who served as the applicant's mentor.

(Eff. 11/13/99, Register 152; am 9/11/2004, Register 171; am 8/19/2006, Register 179; am 5/4/2013, Register 206; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.171 AS 08.48.181

12 AAC 36.069 is repealed and readopted to read:

12 AAC 36.069. Standards for registration as a landscape architect. (a) In accordance with AS 08.48.331(b), and except as exempted in AS 08.48.331(a), design or creative work involving any of the following constitutes the practice of an aspect of landscape architecture that affects the public health or safety and thus requires registration as a landscape architect:

- (1) investigation, selection and allocation of land and water resources for appropriate uses;
- (2) formulation of feasibility studies, and graphic and written criteria to govern the planning, design and management of land and water resources;
- (3) preparation, review and analysis of land use master plans, subdivision plans and preliminary plats;
- (4) determining the location and siting of improvements, including buildings and other features, as well as the access and environs for those improvements;
- (5) design of land forms and land form elements, storm water drainage, soil conservation and erosion control methods, pedestrian and vehicular circulation systems and related construction details;
- (6) consultation, planning, designing or responsible supervision in connection with the development of land areas for preservation, restoration, remediation, stabilization and

enhancement;

(7) design of non-habitable structures for aesthetic and functional purposes, such as pools, walls and structures for outdoor living spaces, for public and private use;

(8) determination of proper land use as it pertains to natural features; ground cover, use, nomenclature and arrangement of plant material adapted to soils and climate; naturalistic and aesthetic values; settings and approaches to structures and other improvements; and the development of outdoor space in accordance with ideals of human use and enjoyment;

(9) design with a priority to ensure equal access to all public goods and services through the use of barrier-free and inclusive design in compliance with the Americans with disabilities Act (ADA);

(10) consultation, planning, designing or responsible supervision relative to natural drainage and the consideration, determination and solution of inherent problems of the land relating to erosion, wear and tear, blight or other hazards to include the implementation of low impact development and green infrastructure designs;

(11) design of land forms and land form elements relative to recreation and facilities, parks and playgrounds, and related construction details;

(12) consultation, planning, designing or responsible supervision in connection with urban renewal, multimodal transportation, urban design, and neighborhood planning;

(13) consideration of the health, safety, and welfare of the public.

(b) In this section, “public welfare” is defined through environmental sustainability, contribution to economic sustainability and benefits, promotes public health and well-being, builds communities, encourages landscape awareness and stewardship, offers aesthetic and creative experiences, and enables people and communities to function more effectively. (Eff. 7/13/2002, Register 163; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.181 AS 08.48.331
AS 08.48.171 AS 08.48.191

12 AAC 36.070 is amended and relocated to 12 AAC 36.045:

12 AAC 36.070. Postponements. Relocated to 12 AAC 36.045.

Editor's note: 12 AAC 36.070 was relocated at 12 AAC 36.045.

12 AAC 36.080 is amended to read:

12 AAC 36.080. Authorization to take examination. Notification of the applicant's authorization to take the examination will be made **at least 30 days** before the examination. (Eff. 5/23/74, Register 50; am 9/30/78, Register 67; am ____/____/_____, Register _____)

Authority: **AS 08.48.101** [AS 08.48.101(a)]

The section heading of 12 AAC 36.100 is amended to read:

12 AAC 36.100. Required [CONTENT OF] examinations.

12 AAC 36.100(d) is amended to read:

(d) Unless an applicant is registered by comity under AS 08.48.191(c), an applicant for registration as a land surveyor must pass the professional land surveyor examination, that includes

(1) the NCEES Principles and Practices of Surveying; [AND]

(2) [REPEALED 3/16/96;

(3)] a state examination covering laws, procedures, and practices concerning land surveying in Alaska; **and**

(3) the NCEES Fundamentals of Surveying.

(Eff. 5/23/74, Register 50; am 6/3/89, Register 110; am 10/20/90, Register 116; am 3/16/96, Register 137; am 11/13/99, Register 152; am 8/19/2006, Register 179; am 7/12/2008, Register 187; am 7/19/2009, Register 191; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.181 AS 08.48.191
AS 08.48.171

The introductory language of 12 AAC 36.103(d) is amended to read:

(d) If an architect who provides a reference letter under (e) of this section does not possess a seal, the **architect** [APPLICANT] must provide the board **an explanation** [A STATEMENT FROM THAT ARCHITECT],

• • •

(Eff. 6/3/89, Register 110; am 1/1/90, Register 116; am 3/16/96, Register 137; am 7/26/97, Register 143; am 11/13/99, Register 152; am 6/13/2003, Register 166; am 7/12/2008, Register 187; am 7/25/2008, Register 187; am 3/11/2012, Register 201; am 3/28/2019, Register 229; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.171 AS 08.48.191

12 AAC 36.105(a)(1) is amended to read:

(1) documents education and passage of examinations that meet the requirements of (b) **or (h)** of this section;

The introductory language of 12 AAC 36.105(g) is amended to read:

(g) If an engineer who provides a work experience verification under (c)(1) of this section

or a reference letter under (c)(2) of this section does not possess a seal, the **engineer**

[APPLICANT] must provide the board **an explanation** [A STATEMENT FROM THAT ENGINEER],

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(Eff. 9/30/78, Register 67; am 8/13/87, Register 103; am 6/3/89, Register 110; am 10/20/90, Register 116; am 3/16/96, Register 137; am 7/26/97, Register 143; am 8/26/98, Register 147; am 11/13/99, Register 152; am 3/9/2001, Register 157; am 6/11/2005, Register 174; am 7/25/2008, Register 187; am 7/19/2009, Register 191; am 5/25/2017, Register 222; am 3/28/2019, Register 229; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.181 AS 08.48.191

AS 08.48.171

12 AAC 36.106 is repealed:

12 AAC 36.106. Registration in additional branches of engineering. Repealed. (Eff. 3/11/2012, Register 201; repealed ____/____/_____, Register _____)

The introductory language of 12 AAC 36.107(a) is amended to read:

(a) Under AS 08.48.191(c), the board **may** [WILL, IN ITS DISCRETION,] issue a land surveyor registration, [WITHOUT EXAMINATION,] to an applicant who

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(Eff. 6/3/89, Register 110; am 10/20/90, Register 116; am 3/16/96, Register 137; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.181 AS 08.48.191

AS 08.48.171

12 AAC 36.108 is repealed:

12 AAC 36.108. Application for registration as a structural engineer. Repealed. (Eff. 9/9/16, Register 219; repealed ____/____/_____, Register _____)

12 AAC 36.109 is repealed and readopted to read:

12 AAC 36.109. Landscape architect registration by comity. (a) Under AS 08.48.191(d), the board may issue a landscape architecture certificate of registration to an applicant who

(1) documents education and passage of examinations that meet the requirements of (b) of this section;

(2) documents work experience that satisfies the requirements of (c) of this section;

(3) has completed the arctic engineering requirements of 12 AAC 36.110; and

(4) has completed a jurisprudence questionnaire prepared by the board, covering the provisions of AS 08.48 and this chapter.

(b) An applicant for a certificate of registration as a landscape architect by comity must submit

(1) an application for registration by comity in compliance with 12 AAC 36.010, including the applicable fees established in 12 AAC 02.110;

(2) verification of a current registration to practice landscape architecture in a state, territory, or possession of the United States, the District of Columbia, or a foreign country that is based on education, experience, and examination requirements that the board determines were at least equivalent to the requirements of AS 08.48 and this chapter at the time the

applicant's out-of-state registration was issued; and

(3) either

(A) verification of at least 24 months of responsible charge experience as a landscape architect as defined under AS 08.48.341(9) or as verified by the signature and seal, except as provided in (c) of this section, by the landscape architect who supervised the applicant and who at the time of providing supervision, was legally registered as a professional landscape architect in a state, territory, or possession of the United States, or a foreign country; or

(B) if the applicant has been practicing landscape architecture for five years or more in a state, territory, or possession of the United States, the District of Columbia, or a foreign country, two letters of reference verifying that experience; each letter must be signed and sealed, except as provided in (c) of this section, by a landscape architect who is legally registered in a state, territory, or possession of the United States, territory, the District of Columbia, or a foreign country.

(c) An applicant for a certificate of registration as a landscape architect by comity under this section may submit council record issued by CLARB to verify the applicant's qualifications including

(1) examination results;

(2) education; and

(3) registration in another licensing jurisdiction.

(d) If a landscape architect who provides work experience verification under (b)(2) of this section or reference letter under (b)(3) of this section does not possess a seal, the applicant must provide the board a statement from that landscape architect

(1) providing that landscape architect's registration number; and

(2) for the landscape architects providing a reference letter, certification that the registration of that landscape architect is current. (Eff. 11/13/99, Register 152; am 7/25/2008, Register 187; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.181 AS 08.48.191
AS 08.48.171

12 AAC 36.110 is amended to read:

12 AAC 36.110. Northern design [ARCTIC] requirement. (a) An applicant for registration as an architect, engineer, or landscape architect must have successfully completed a board-approved university-level course in **northern design** [ARCTIC ENGINEERING] or its equivalent.

(b) Repealed 3/28/2019. (Eff. 5/23/74, Register 50; am 9/30/78, Register 67; am 8/13/87, Register 103; am 11/13/99, Register 152; am 3/28/2019, Register 229; am ____/____/_____, Register _____)

Authority: AS 08.48.101 AS 08.48.181 AS 08.48.191
AS 08.48.171

12 AAC 36.115(b)(3) is amended to read:

(3) seeking an active certificate of registration

[(A)] as a professional architect, engineer, **land surveyor**, or landscape architect meets at the time that application is made under this section the continuing education requirements applicable under **12 AAC 36.510 – 12 AAC 36.550**
[12 AAC 36.510(j);

(B) AS A PROFESSIONAL LAND SURVEYOR MEETS AT THE

TIME

THAT APPLICATION IS MADE UNDER THIS SECTION THE CONTINUING
EDUCATION REQUIREMENTS OF 12 AAC 36.510 - 12 AAC 36.550 FOR
ONE

BIENNIAL REGISTRATION PERIOD]; and

(Eff. 7/26/97, Register 143; am 11/13/99, Register 152; am 3/9/2001, Register 157; am
8/19/2006, Register 179; am 7/12/2008, Register 187; am 7/13/2011, Register 199; am
____/____/____, Register _____)

Authority: AS 08.48.101 AS 08.48.215

The introductory language of 12 AAC 36.135 is amended to read:

12 AAC 36.135. Review of application for corporate, limited liability company, or limited liability partnership authorization. An applicant who meets the requirements [ON THE CHECKLIST] established by the board in this section has demonstrated the necessary qualifications for a certificate of authorization for corporate, limited liability company, or limited liability partnership practice. An applicant who does not meet the requirements on this checklist or whose responses on the application form do not clearly show that the applicant is qualified to receive a certificate of authorization will not be issued a certificate unless the board further reviews the application and determines that the applicant meets the qualifications in AS 08.48.241 for a certificate of authorization. A certificate of authorization for corporate, limited liability company, or limited liability partnership practice will be issued to an applicant who submits

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12 AAC 36.135(4) is amended to read:

(4) a copy of the bylaws of the corporation, the articles of **organization** [INCORPORATION] or operating agreement of the limited liability company, or the partnership agreement of the limited liability partnership showing that the corporation, limited liability company, or limited liability partnership has complied with the requirements in AS 08.48.241(b)(1);

The introductory language of 12 AAC 36.135(7) is amended to read:

(7) a certified statement **in a format approved** [ON A FORM PROVIDED] by the board, stating that each licensee designated in responsible charge for each branch of practice acknowledges and agrees to that designation by the corporation, limited liability company, or limited liability partnership; the statement must include each responsible charge licensee's

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(Eff. 10/10/96, Register 140; am 11/13/99, Register 152; am 3/8/2001, Register 157; am 3/9/2001, Register 157; am 8/19/2006, Register 179; am 10/31/2019, Register 232; am ____/____/____, Register ____)

Authority: AS 08.48.101 AS 08.48.241

12 AAC 36.920 is amended to read:

12 AAC 36.920. Board bylaws. The board will conduct its meetings and activities under the bylaws established by the board in the pamphlet entitled "*Bylaws*," dated **November 2020** [MAY 2014], adopted by reference. (Eff. 10/28/2010, Register 196; am 10/4/2015, Register 216; am ____/____/____, Register ____)

Authority: AS 08.48.101

Editor's note: The pamphlet entitled "*Bylaws*" adopted by reference in 12 AAC 36.920 may be obtained from the Department of Commerce, Community, and Economic Development, Division of Corporations, Business and Professional Licensing, State Board of Registration for Architects, Engineers, and Land Surveyors, State Office Building, 9th Floor, 333 Willoughby Avenue, Juneau, Alaska 99801; phone (907) 465-1676.

12 AAC 36.990(a)(17)(O) is repealed:

(O) **repealed** _____ / _____ / _____ [STRUCTURAL ENGINEERING];

12 AAC 36.990(a) is amended by adding new paragraphs to read:

(46) "progressive structural experience" means that a candidate for structural licensure progresses in job knowledge and duties and that their experience increases in their level of responsibility and knowledge of their profession;

(47) "mentoring program" in which a corresponding licensee reviews a mentee's work on a regular basis to ensure that the work meets the standard of care of that discipline and confirms that the mentee is developing experience and responsible charge.

(Eff. 5/23/74, Register 50; am 9/30/78, Register 67; am 6/29/84, Register 90; am 8/29/87, Register 103; am 10/20/90, Register 116; am 3/16/96, Register 137; am 7/26/97, Register 143; am 8/26/98, Register 147; am 11/13/99, Register 152; am 3/9/2001, Register 157; am 1/26/2012, Register 201; am 3/11/2012, Register 201; am 10/4/2015, Register 216; am 9/9/2016, Register 219; am 5/25/2017, Register 222; am _____ / _____ / _____, Register _____)

Authority: AS 08.48.101 AS 08.48.181 AS 08.48.331
AS 08.48.171 AS 08.48.191

MOTION to Approve:

I move that it be resolved to APPROVE the following list of applicants for registration by comity and examination with the stipulation that the information in the applicants' files will take precedence over the information in the minutes.

MOTION to Conditionally Approved:

I move that it be resolved to CONDITIONALLY APPROVE the following list of applicants for registration by comity and examination with the stipulation that the information in the applicants' files will take precedence over the information in the minutes.

MOTION for Incomplete:

I move that it be resolved to find the following list of applicants for registration by comity and examination INCOMPLETE with the stipulation that the information in the applicants' files will take precedence over the information in the minutes.