



Regarding NCEES and Survey Licensing

I thank the Council for its many years of work assisting state boards, preparing exams and for generally advancing the surveying profession and contributing to protecting the public. Your stated missions are worthy. However, as stated in the Council's December, 2014 "Exchange," portions of charges given to one of your committees and to a task force raise red flags that must be discussed by those knowledgeable with the issues, methods

removed from the Model Law, as has been done for the PE Exam."

And to the Future of Surveying Task Force: "The task force will evaluate the current state of the surveying profession in terms of what NCEES can do to mitigate the low number of candidates seeking licensure as professional surveyors and to better promote the value of a career in the surveying profession... It will also evaluate whether state-specific exams can be transitioned to region-specific exams or be eliminated."

exam(s). Making the road shorter or less bumpy or somehow making the exam easier so more people can become licensed will not solve the problem because the licensing issues are not the problem. When a young person decides, perhaps, that surveying may be "the thing" for them, they are not thinking about the road to licensure, and they know nothing of the exam(s). They do know if the work seems interesting, i.e. you get to be outdoors a lot, or, it applies technology. They also know the education requirements seem not too onerous and that it provides a good job and it pays well. Exam issues, if there are any, are not related to young people being attracted to surveying.

I would submit it is not NCEES' job to increase the number of people entering the profession, but if the Council wishes to "weigh in," I guess that's fine. It is the Council's job to prepare meaningful, defensible exams which separate those candidates who are minimally qualified from those who are not. Concentrate on that.

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and consequences of what you propose. Of course that is the purpose of your committee and task force and I hope your proposed changes will have a full and fair airing by the surveying community before any thought is given to adopting them. So, here are my thoughts for the Council, and, more importantly, state licensing boards, who have the authority to adopt or reject the Council's recommendations, and ultimately whose responsibility it is to protect the public in their state.

Committee Charges

Let's look at the troublesome part of the charges to the Committee on Examinations for Professional Surveyors: "It (the committee) will also consider whether the requirements that experience must be earned before a candidate can take the PS Exam should be

Attracting More People to the Profession

As to an NCEES Task Force mitigating "the low number of candidates seeking licensure," that's fine (although I don't see that anywhere in the stated NCEES mission), we all know the number of men and women entering the surveying and mapping profession has decreased with an accompanying decrease in the number of exams administered. The National Society of Professional Surveyors (NSPS) and its member state societies should be doing all it can to attract young, qualified, smart, ambitious individuals to our profession. The reason for the decreased numbers entering the profession is simple: It's the economy. Just ask any seasoned professional surveyor in private practice.

The reason for this decrease is not the road to licensure and not the licensing

The Experience Requirement

As to completely eliminating the experience requirement in order to become licensed, that's not what NCEES is suggesting. What is being suggested is that candidates be allowed to sit for the PS Exam without having any experience, then, gain whatever experience is required, then be given a license to practice. The committee charge says this process would be "as has been done for the PE Exam."

To review: The FS Exam is designed to test on one's surveying education, no experience and no professional practice necessary. (Although some states require no education.) In the FS Exam Specification the word

“practice” is not used. Then, having passed the FS Exam one gains whatever progressive, meaningful, mentored experience is required by the state board (under the direct personal supervision of a licensee). Then an application is filed to sit for the PS Exam at which time the board insures the proper experience has been obtained, then the candidate (LSIT or SI) sits for the PS Exam and the state-specific exam.

Becoming a professional surveyor is a function of surveying education, mentored experience and examination. The chronology is: Education, FS Exam, mentored experience, PS Exam, a state-specific exam. This sequence makes sense and has been in place for many years. (This sequence could be a bit of a generalization...the exception can always be shown in surveying, and, again,

of a reason. A lot of engineering students (in their last semester of college) and recent engineering graduates take the FE Exam. Some colleges and universities require that their students must take the FE Exam to graduate. So, the number of folks taking the FE Exam is high, but only a small percentage go on to get their experience and then sit for the PE Exam. This is because a majority of those who pass the FE Exam will never need to become a PE. The engineers who go to work for utilities, most industries, sales, or those who decide to leave the profession will not need a PE license and will never sit for the PE Exam. So, letting anyone who wants to sit for the PE Exam prior to experience may be a way of getting a few more people to become

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NCEES used to say one would need education to pass the FS Exam and practice or experience to pass the PS Exam (as it should be). In the PS Exam Specification, there are five knowledge areas listed. Two of them have the word “Practices” in their titles. Presumably these are being examined for on the PS Exam and presumably one must have acquired mentored, progressive experience in practice in order to develop this knowledge. What’s being proposed is adverse to NCEES’ own PS Exam Specification.

Again, I can think of no good reason to do what NCEES is suggesting with this experience requirement, but actually I can. Read on.

The PE Model

I cannot understand why in the world the engineering profession would allow the PE Exam to be taken by presumably recent college graduates without any experience in engineering. Well, actually, I can think

PE’s. They’ve already passed the exam (more on that in a minute), their career turns out to provide the experience they need, so they become a PE.

But, allowing the candidate to take the PE Exam without any experience...isn’t that a bad idea? If the PE Exam is any good, how would the young engineer possibly pass it? Doesn’t it require engineering experience to do so? Without experience, wouldn’t 100% of those who took the exam fail it? To offer the exam to such folks, aren’t you offering a false hope? Candidates’ lawyers, state boards and state legislatures will not allow 100% of those who take the exam to fail it.

Or, suppose it turns out that a large percentage of examinees actually can pass the PE Exam without any experience. What’s next? You guessed it. Some legislator will pick up on this and there goes the experience requirement in your state’s law.

Actually (and I’m sure NCEES has the data), what if exam results show that it really doesn’t make any difference if the person has any experience or not, about half pass and half fail. Some failed candidate is going to point that out to some Administrative Judge and I’ll bet you a cheeseburger that person is going to get a PE license.

Surveyors to Follow the PE Model?

The “well, let them sit for the PS Exam so it will attract more people to professional surveying” and following the misguided “PE Model” quoted in the committee charge does not hold water for surveyors for a couple of reasons:

1. Every surveying technician or serious surveying student knows the importance of obtaining a PS license. Those who set that as a goal do not use the LSIT (or SI) as some interim step. They don’t need any enticement to continue toward their PS licensure. The steps toward becoming a PE are different. Because a low number of EITs become PE’s, perhaps a few more can be enticed by letting them take the PE Exam “early.” Not true for surveyors, they’re “in it” for the PS license from the start.
2. If the reasoning is that by making it somehow “easier” to get licensed, that will attract more individuals to the surveying profession, that notion is misguided. As discussed, no young person deciding whether to enter the surveying profession makes that decision on anything to do with licensing. Licensing issues of the type addressed here have nothing to do with attracting young people to the profession.

Eliminate the State-Specific Exam

Eliminate the state-specific exam? Are you kidding? Just one question which arises is: Well, OK, where in the exams process is the U.S. Public Land Survey System (USPLSS) going to be tested? Within the PS Exam? Will the “colonial states” take the same exam? If so, it seems only the most casual questions about the System would be fair to them. Or, perhaps the “colonial states” and the “public lands” states will have separate PS Exams. NCEES did that some years ago and that method was correctly abandoned in favor of a state-specific exam. (I know, I worked on the USPLSS questions for NCEES.) If the USPLSS were placed on a single national PS Exam, how meaningful could the Public Lands portion possibly be? Woefully inadequate. Even the most mundane question about the USPLSS will have exceptions or conditions which will make the question not applicable in some

states. The current PS Exam Specification lists the USPLSS as “fair game.” I can only imagine how cursory those questions must be and I’d bet you another cheeseburger the “most correct answer” is not correct for every state which uses the USPLSS. They certainly cannot be of the content, depth and specificity possible on a state-specific exam (not to mention the necessity).

Here’s an idea for you: Take the USPLSS questions off of the PS Exam. Leave that important subject area to the states and their state-specific exams. “Oh, but that way the colonial states applicants will never be examined on the USPLSS” you say. I’d suggest they don’t have to be. If they venture out to a USPLSS state, let them study the System for that state, then take and pass the state-specific exam. Same goes the other way. I suspect there are statute, case and administrative law; knowledges; legal principles; and research procedures in those sequence-conveyance colonial states unknown or imagined to we who think the sun rises and sets on the USPLSS.

The USPLSS is but one subject area for which a “one size fits all,” national exam administered to all is a real bad idea. Other subject areas for which each state is completely different or has their differences, and should be examined for, state by state include: Riparian, littoral and tidal boundaries. State statutes. State agency and state licensing board codes or regulations. State minimum survey standards. The methods of the original surveys on the USPLSS. The methods, law and rules applicable to resurveys on the USPLSS.

There will be general questions on these subjects which would be appropriate for either the FS or PS Exams (some part of all these subjects being covered, hopefully, in the applicant’s surveying education). However, there will be plenty of material on these subjects, specific to each state, which should be examined and the candidate judged minimally qualified (i.e. passes the exam) before being issued a Professional Surveyor license.

Attorneys take a national exam and an exam specific to the laws, rules, methods of the state in which they become licensed. There are close parallels between attorneys and the surveyor who determines boundary location (includes surveyors who work on the USPLSS). We both apply the law (statute, case, administrative), some very specific to our state, then issue an opinion.

(We draw a picture of our opinion and go monument it.) We, like attorneys, have a sufficient state-specific body of knowledge to require such an exam. I doubt the American Bar Association is considering eliminating their state-specific exam for attorneys. We shouldn’t be either.

Actually, I can imagine a reason for just getting rid of the state-specific exam... expediency. When the PS Exam transitions to being computer-based, each state board will need to decide if or how the administration of their state-specific exam needs to be changed. Perhaps the board transitions it

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to computer-based. Perhaps they continue to offer a paper exam twice a year (or, more often). The easiest path, the expedient solution is to just eliminate them. But, as in life, the easy and expedient way is rarely the best path. I’m confident each state board will ferret out what is the best method for administering their state-specific exam.

NCEES Can Help

As to the state-specific exams and making them better, there are a couple of things NCEES could do. Establish a repository of recent state-specific exams where those charged with preparing such exams would review them for form, format, content and length. This would be helpful. Provide a forum (perhaps by NCEES Zone) where state-specific exam challenges can be discussed by those charged with preparing them.

“Transportability”

As to this “transportability” idea I’ve heard bandied about...a Professional Surveyor from one state somehow being easily or automatically licensed to practice in another state (no state-specific exam required, but pay a fee of course), this is another real bad idea. This isn’t professional engineering, this is professional surveying. (You PS’s will understand this; the PE’s not so much.) In professional boundary surveying, within which I would place the USPLSS, there are sufficient meaningful differences in the law and methods to

require that each applicant for a PS license by comity must pass a state-specific exam. The thought to just issue a “national” license and expect the licensed professional to not practice when he or she believes they are outside their area of expertise is a high idea, but it will absolutely fail in practice.

If the Council believes PS licenses are so transportable and the states are so similar that a state-specific exam is so not necessary, here’s a test of that theory: Ask each state board what percent of comity applicants pass their state-specific exam on their first attempt. I’ll bet yet another cheeseburger the

answer is less than 50%. As it has for years, the state-specific exam serves an important purpose. I cannot come up with any reason to eliminate it, but would like to know why the Council thinks this needs to be considered. (Which I don’t view as a Council mission.)

Closing

Every licensing board’s purpose is to protect the public. NCEES’ role is to help its member boards accomplish that goal. I firmly believe some of the NCEES committee charges, discussed herein, if adopted or implemented by state boards would be detrimental to protecting the public. ■

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P.S. I like grilled onions on my cheeseburgers.

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