

## On the PATH to SE Licensure

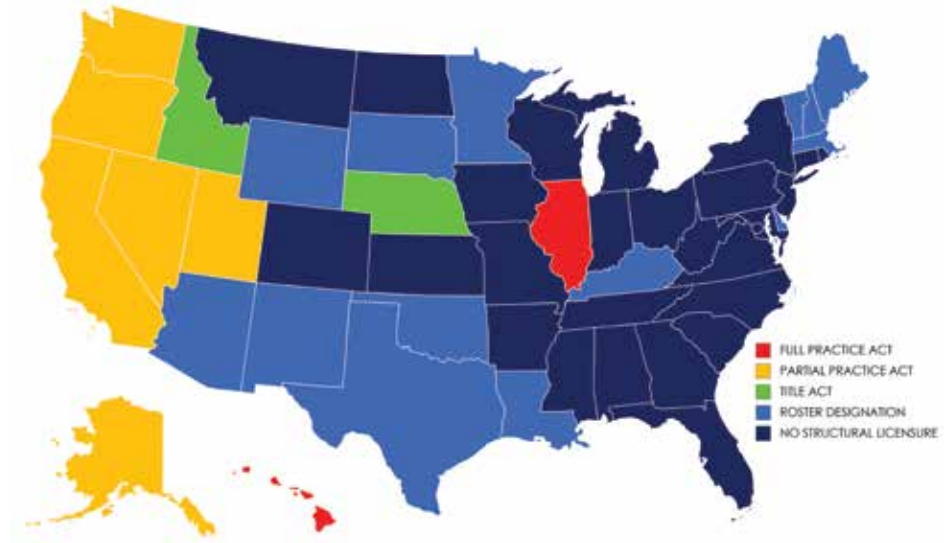
By Brian Falconer, P.E., S.E., SECB

Currently, there is no Structural Engineering (SE) Licensure in New York State. For those of you that are unfamiliar, SE Licensure provides a unique license to distinguish structural engineers from other professional engineers. In general, the intent is to prevent less experienced engineers from designing more critical structures. The arguments for establishing an SE License are readily available on the NCSEA website (<https://bit.ly/2AEa3Y2>) and the SE Licensure Coalition website (<https://bit.ly/2C7Nnjk>).

As the chairperson for the SE Licensure Committee for the Structural Engineering Association of New York (SEAoNY), I am often asked, “What is the status of SE Licensure in New York?” Unfortunately, there isn’t a satisfying short answer to that question. The pursuit of SE Licensure is a campaign as opposed to a short-term goal.

For New York, looking to initiate an SE License is a significant lift for a variety of reasons. First, geography – the closest state to New York to have an SE License is Illinois; therefore, we cannot claim we are falling behind our neighbors. Second, lobbying is expensive and complicated – New York has a large population and a large legislature; therefore, lobbying the continually changing legislature as a whole is an expensive proposition. Third, public knowledge – the general public does not know anything about licensure much less about SE Licensure and why it would be to their benefit; therefore, public education has to be provided. All states have similar obstacles, but probably to varying degrees.

Something else that all states have in common is some form of professional resistance. At first, P.E. holders who do not design critical structures are typically resistant to the idea of SE Licensure. Some object to losing the “right” to design these structures, and others think it is unnecessary regulation that will lead to lots of other licensing. Architects and Owners question if this is going to cost them more. With patience and reason, most of these professionals can be encouraged to see the short and long-term value of having more qualified people doing their critical



SE Licensure: Title Restrictions, Partial Practice Restrictions, Full Practice Restrictions, and Roster Designations as found on the NCSEA website.

structural work and cease to feel threatened or dismayed by it.

To start a path toward licensure, the Committee went to the NCSEA website Resources for SE Licensure (<https://bit.ly/2Z5bB6G>) and downloaded a few articles. We continued reviewing the materials there and downloading more articles to organize our committee and our tasks and goals to advance SE Licensure. We have spent the last few years clarifying what SE Licensure should mean in New York state, educating our membership about it, building relationships with New York engineers, architects, owners, and legislators, and producing articles, letters, and emails for promoting and defending SE Licensure.

At this point, we are preparing marketing materials, legislative language, and organizing to lobby our legislature. Yes, this is a lot of work. Yet, marketing materials are similar from state to state, and the legislative language is related to existing legislative language for engineers and other professionals. Lobbying your legislature is quite a unique experience unless you hire someone to do it for you. We do not have the money to do that at this point, so this may be the most unnatural and challenging task for us to complete ourselves. I think it is valuable for us to concentrate as a group on some things

that we all have an interest in making more common from state to state.

As simple as the concept may be, SE Licensure will always be a state-controlled process. As mentioned, it must be tailored to the specific conditions of each state. A more consistent national approach would strengthen the case for SE Licensure in all states, much like the national case for adoption of the *International Building Code*. The broad reasons for having an SE License are not unique to any state. Our most critical structures will perform better and be more efficient if we have more qualified structural engineers responsible for their design. Whether your extreme event is wind, snow, earthquake, or flooding does not really matter.

With this in mind, I would like to consider a few of the characteristics that are selected nationally. Keep in mind that I am not criticizing states for adopting lesser standards. Obviously, New York has no standard when it comes to SE Licensure. However, I am suggesting that these lesser standards should be a stepping-stone to the desired greater good.

### Title Act vs. Practice Act

A Title Act allows you to have the legal title of Structural Engineer. A Practice Act

restricts the practice of designing some structures to a Structural Engineer. For instance, in a title act state, any Professional Engineer can design a hospital structure; however, in a practice act state, only a Structural Engineer can design a hospital structure. Without any knowledge of exactly who the Professional Engineer of Record and Structural Engineer of Record are, would you feel more comfortable going to a hospital during an earthquake in a title act state or a practice act state? I would feel more comfortable going to the hospital in a practice act state. New York's goal is to get a Practice Act. The public is better served in every state by having its most critical structures designed by the most qualified Structural Engineers. Everyone's goal should be to get a practice act.

### National Standard for the Threshold Structure

Should an essential facility be designed by a Structural Engineer in one state and by a Professional Engineer in another? Certainly not. Essential facilities should be designed by licensed structural engineers in every

state. What about when a dynamic analysis is required? What about when simplified wind and seismic designs are not an option? What about buildings where more than 500 people gather in one area? What about buildings with an occupancy above 5000? Many people practice structural engineering on some level, and few structures are going to require an SE License to design them. However, defining those buildings consistently at the national level should be our goal.

### Grandfathering

Among practicing professional engineers, it is popular to say everyone can be grandfathered if they have a current PE License just by filling out a form. This is not in the public's best interest in the short term; however, it can be in the long term. At the same time, you do not want to suddenly exclude engineers that *have* been doing this critical work from doing any more of it. We need to limit grandfathering into SE Licensure to only a P.E. that is already doing the critical work before the law goes into

effect. That means that someone that wants to be grandfathered should demonstrate experience in doing critical structures to obtain their SE License.

Most states do not have an SE License. Hopefully, this article develops an interest in pursuing an SE License in many of those states. Some states are already somewhere along the road to licensure, and this can provide renewed energy for your campaign. A few states that already have an SE License Title Act will read this and, hopefully, be encouraged to pick up the mantle to go the rest of the way. I cannot predict how the path unfolds for each of us, but I am confident that we can arrive at the same place together.

If you are interested in the SEAoNY suggested threshold or grandfathering, please visit our website ([www.seaony.org/SELicensure](http://www.seaony.org/SELicensure)). ■



*Brian Falconer is a Principal in the firm Severud Associates, and he is the Structural Engineering Licensure Committee Chairperson of the Structural Engineers Association of New York. (bfalconer@severud.com)*

ADVERTISEMENT—For Advertiser Information, visit [STRUCTUREmag.org](http://STRUCTUREmag.org)

## RECORDS

“An NCEES Record makes it fast, easy, and convenient to apply for additional P.E. licenses in other states.”

**Alexander Zuentdt, P.E.**  
Zuentdt Engineering  
Record holder since 2011



**NCEES**  
*advancing licensure for engineers and surveyors*

**National Council of Examiners for Engineering and Surveying®**  
P.O. Box 1686, Clemson, S.C. 29633  
864.654.6824

Build your NCEES Record today.  
[ncees.org/records](http://ncees.org/records)