A Young Engineer’s Case for Structural Licensure

By Emily Guglielmo, S.E.

During my first NCSEA conference in 2011, I was inspired by the passion for the structural engineering profession displayed by my more senior peers. Throughout the conference, a major discussion topic was the need for structural licensure in addition to generic professional engineering licensure. As I listened to the arguments, I did not fully understand the reasoning either for or against structural licensure. Years later, I can now state with full confidence that I strongly support efforts toward structural licensure, and I ask all of my young professional peers to stand with me.

Why did you choose to be a structural engineer? Perhaps you loved to innovate, build, and create. Mathematics and science might have been your passion, and engineering was a pragmatic direction. Raised in the San Francisco Bay area, I developed a lifelong fascination with earthquakes. I vividly remember the 1989 Loma Prieta event. Midway through gymastics practice, the building lights swayed back and forth, the balance beam shook, and the doors and windows rattled loudly. I was fortunate to be inside a safely designed building with adequate bracing and structural support. From that day forward, I was fascinated with the idea of creating structures that could withstand these extreme forces of nature and protect their occupants.

Fast forward through a college and graduate education, and many years of practical engineering experience, and I was thrilled to be eligible for my license. As I recall sitting for the Principles and Practice of Engineering (PE) examination, my memories are of wastewater, fluid dynamics, and environmental remediation. Successfully passing the exam, the most convenient time to take the SE exam is early, when you are the most efficient at design and familiar with codes and standards. As a bonus, the NCEES SE exam creates a nationwide platform to apply for comity in most states, resulting in additional professional distinction and opportunity.

As tomorrow’s leaders, I strongly urge you to become an advocate for structural licensure. Most jurisdictions already have local licensure committees who would greatly benefit from a passionate young structural engineer promoting structural licensure. Furthermore, you can serve as an example to your peers by taking the SE exam. Many NCSEA Young Member Groups offer technical training and team study approaches to help engineers prepare for the exam.

Structural engineering is at a critical crossroads. Visionary leadership from young professionals is vitally needed to address many significant challenges. While they may appear daunting, they can also be viewed as an opportunity for young engineers to shape the future of the profession and protect their communities. I strongly urge you to advocate for structural licensure in your state, take the SE exam, and help advance our practice while improving public safety.

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