Position Statement on Structural Licensure

Policy

The Structural Engineers Association of Ohio (SEAoO) supports licensure for structural engineers to more effectively fulfill the engineer's obligations for safeguarding the life, health, property and welfare of the public. SEAoO encourages passage of legislation that includes three provisions:

1. A specific definition of the practice of structural engineering;
2. A definition of a structural engineer and;
3. A requirement that a structural engineer have responsible charge for the structural engineering of significant structures.

Issues

The following issues related to engineering practice and licensure should be addressed in the implementation of a structural licensure system:

- Education, experience and examination standards required to practice structural engineering should be identified.
- Reasonable compatibility with structural licensure provisions in other jurisdictions should be provided to facilitate the practice of qualified engineers in all jurisdictions
- Recognition of professional engineers practicing structural engineering should be allowed by including an equitable transition mechanism
- Structures that possess sufficient complexity, pose a substantial impact on the public in the event of a structural failure, or some combination of these, should be defined.

Rationale

Implementation of structural licensure is consistent with the rationale for establishing engineering licensure, as it, like engineering licensure, helps safeguard the public health, safety and welfare. Similar the boundaries placed on the broader practice of engineering, structural engineering licensure is important for the following reasons:

- Structural engineering involves the application of specialized scientific principles and knowledge with the potential to influence public well-being;
- Attaining structural engineering knowledge requires specific education and training;
- Consumers of structural engineering services typically cannot determine which practitioners are sufficiently qualified. Allowing market forces to establish qualified practitioners imparts an unacceptable level of risk to the public.

STRUCTURAL ENGINEERS ASSOCIATION OF OHIO

SEAoO Position Statement

The engineering body of knowledge has grown significantly since engineering licensure was first established. And within that body, civil engineering has also witnessed significant changes and diversification, in its educational foundations, its practice and the exams used to consider proficiency.

As a branch of civil engineering, structural engineering has grown to become its own field of expertise. The curriculum required for structural engineering proficiency is sufficient to leave structural students limited room for study in other civil engineering branches. Some ABET accredited civil engineering programs offer structural engineering specialization, recognizing the breadth of material in this branch. While other degree programs offer less opportunity to study the complete basis of structural engineering. Accompanying the increased body of structural engineering knowledge, university programs have decreased the number of credit hours required to obtain an engineering degree. This leaves many entering the structural engineering field with a less than complete educational foundation. Implementation of structural licensure would clearly identify registered practitioners who have attained the appropriate educational background through university courses or other means.

In its practice, structural engineering has become more involved than in the past, both in terms of the number of code provisions required to adequately produce designs and the complexity of structures. The research underlying building codes and material standards has greatly expanded the amount of material a structural engineer must understand to effectively practice the profession. Further, clients, architects, and other factors have combined, to press structural engineers into more complex designs. Implementation of structural licensure would provide an opportunity to ensure structures deemed to be sufficiently complex or significant are designed under the responsible charge of an engineer who has demonstrated proficiency in structural engineering.

The National Council of Examiners for Engineering and Surveying (NCEES) develops, administers and scores, the licensing exams for each of the engineering disciplines. NCEES promotes uniformity for engineering licensure in U.S. jurisdictions and it has taken two steps that aid the establishment of structural licensure. First, by creating the Model Law Structural Engineer (MLSE) designation, NCEES established the importance of particular education, experience and examination requirements for the practice of structural engineering. Second, by creating and offering the Structural Engineering (SE) exam, NCEES sets the minimum standard required to demonstrate competency in structural engineering. This exam helps each jurisdiction to determine which individuals have met the minimum standards.

SEAoO believes that establishing structural licensure in Ohio is appropriate given the changes in the practice of engineering and, more importantly, it would offer a means to better fulfill our obligation to safeguard the public health, safety and welfare.