

N.C.S.E.A. - Feasibility Study for Board Certification of Structural Engineers – Interim Report to the Summit

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Certification

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Acknowledgements

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Mission Statement



- **To study existing Board Certification Systems.**
- **To form a conceptual model of a Structural Engineering Certification System.**
- **To determine how the Structural Engineering Profession would benefit from Board Certification.**

Existing Organizations we have studied

- **National Council of Examiners for Engineering and Surveying (NCEES)**
- **National Council of Architectural Registration Boards (NCARB)**
- **American Board of Medical Specialties (ABMS)**
- **Council of Engineering and Scientific Specialty Boards (CESB)**

NCEES

- **Writes the Examinations required for Licensure.**
- **Helps the various boards develop educational, training and reciprocity criteria for licensure. (state criteria vary)**
- **By Charter, cannot Certify Engineers.**

NCARB

- **Is composed of 55 member boards of registration for Architects.**
- **Writes the Examinations required for Licensure.**
- **Helps the various boards develop educational, training and reciprocity criteria for licensure. (state criteria vary)**

NCARB Strengths as a Model

- **All licensing boards participate.**
- **The Examination is Standardized.**
- **Some states will allow selected services to be performed by Certified practitioners prior to licensure.**
- **Most states grant reciprocity for licensure to Certified practitioners.**

NCARB Weaknesses as a Model

- **Certification as an Architect is too general to speak to specific specialties or skills. (such as in Engineering)**
- **Despite the system, states vary widely in the requirement for internship. (many require none).**
- **Certification may not be widely accepted by the public as a criteria to practice.**

American Board of Medical Specialties (ABMS)

- **Boards grant Certificates based on education, training, examination.**
- **Consists of 24 Boards, Grants 37 Certificates, represents 84 sub-specialties.**
- **Boards consist of Volunteer Professionals (Peers).**
- **Re-certification is required at 7 to 10 year intervals.**
- **Maintenance of expertise must be demonstrated based on.**
 - Professional Standing**
 - Lifelong learning and self assessment**
 - Periodic Examination**
 - Evidence of practice performance**

ABMS – Strengths as a Model

- **In addition to Licensure, Certification is mandatory to practice in Hospitals. This fact brings teeth to the certification process. For this reason, the ABMS model seems to be the closest to what we see as an appropriate one.**

ABMS – Weaknesses as a Model

- **Licensure is all that is required to practice outside of Hospitals.**
- **ABMS has 180 competing boards of certification. (all certificates may not be equal)**

Council of Engineering and Scientific Specialty Boards (CESB)

- **Writes the Guidelines for and Accredits Boards of Certification for Professional Engineers and Technicians in a variety of fields.**
- **Member Boards include National Academy of Forensic Engineers and American Academy of Environmental Engineers.**
- **Board of Directors include representation by ABET, NCEES, NSPE, ASCE among others**

National Board of Certification for Structural Engineers – Our Model

Concept

Member Organizations to set up Certification using existing CESB Guidelines.

Boards to be composed primarily of Volunteers from the Structural Engineering Community.

Public members shall also be appointed.

Consensus shall be reached from the Structural Engineering Community on qualifications.

National Board of Certification of Structural Engineers – Our Model

Possible Board Member Organizations

- **NCSEA**
- **SEI**
- **NSPE**
- **NCEES**
- **ABET**

Summary of Feasibility

- **Certification is achievable by and for the Profession without the complexity of legislation. Therefore we can do it now.**
- **We can use guidelines already set up by CESB**
- **Board Certification will only be a Certificate on the wall if we cannot give it teeth. *This is our challenge.***

How Board Certification can benefit our Profession

- **We can determine our own criteria for minimum Educational Requirements.**
- **We can determine the experience requirements.**
- **We can determine testing requirements.**
- **We can assign tiers.**
- **We can assign sub-specialties**

How Board Certification can benefit our Profession

Concept 1: By working with the Licensing Boards in developing our model, our objective can be to make Board Certification one of the requirements for Separate Licensure.

How this works will vary in each State until ultimately conformity may be reached in the majority of states.

How Board Certification can benefit our Profession

Concept 2: Board Certification could be accepted widely enough that it could fill in the gaps in states that have no separate licensure or are in the process of doing so.

How Board Certification can benefit our Profession

Concept 3: Board Certification could be accepted by state and federal agencies as the criteria for selection nationally, above Licensure alone.