



Structural Engineering Licensure

Wednesday, May 10th



- Proposed Regulation Changes to SE Licensure
- SE Exam Transition to Computer-Based-Testing (CBT)
- Open Discussion: State of Structural Engineering in Alaska



Proposed SE Regulation Updates

Why a Regulation Update?

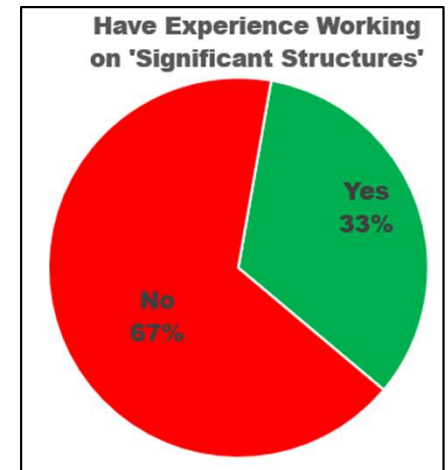
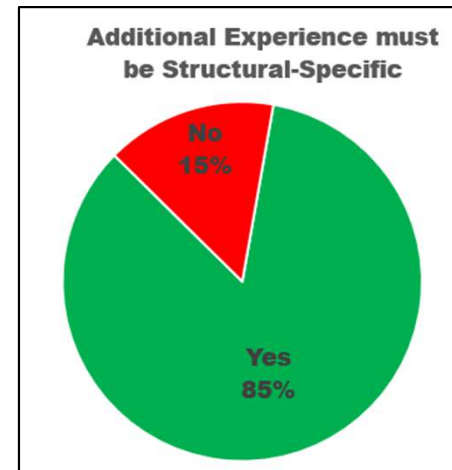
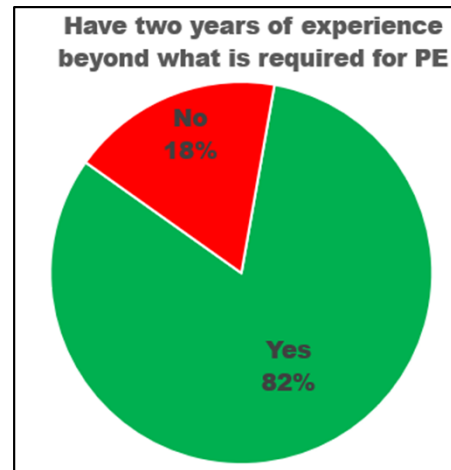
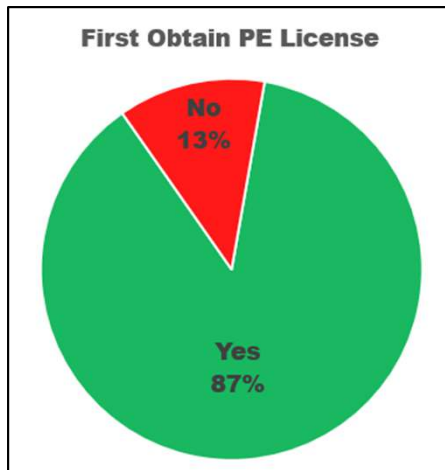
- Clarify SE Requirements
 - Existing Regulations are Unclear
 - Combined with other Disciplines
 - Difficult to Parse what is Actually Required
- Align SE Requirements with Community Standards
 - SE as a Post-PE License
 - Structural Engineering Experience Requirement
 - Experience must be Gained under an SE



Proposed SE Regulation Updates

Community Feedback

Survey Question: Which of the following requirements are appropriate to qualify to take the SE Exam for licensure in Alaska?:



- Survey Feedback from Engineering Community



- Structural Engineers Association of Alaska (SEAAK)
- Survey Period: May – June of 2022
- 39 Respondents



Proposed SE Regulation Updates

Requirements to be a Structural Engineer in Alaska

- Currently be registered as a PE in Alaska
 - or have passed a PE Exam (*comity option*)
- Pass the NCEES Structural Engineering Exam
- Have Two Years Experience Post-PE that:
 - Includes Structural-Specific Design Experience (*new requirement*)
 - Is Obtained Working under a Licensed SE (*new requirement*)



Proposed SE Regulation Updates

Regulation Update: Qualifying for the SE Exam

Currently: Tacked-On to Section on PE Exam Requirements (12 AAC 36.063(k)):

(2) submit as a part of the final report a statement from the professional engineer, who served as the mentor, recommending the applicant for registration.

(k) To be eligible for the structural engineering examination, an applicant must

- (1) be currently registered as a professional engineer in this state; and
- (2) have at least two years of progressive structural experience, in addition to the eight years of education and work experience or both that are equivalent to the requirements set out in the applicable table of education and work experience requirements for a professional engineering examination in this section.

Proposed: New Stand-Alone Section on SE Exam Requirements:

12 AAC 36.071. ELIGIBILITY FOR STRUCTURAL ENGINEERING EXAMINATION. (a) To be eligible for the structural engineering examination, an applicant must

- (1) submit an application for examination as a structural engineer; and
- (2) be currently registered as a professional engineer in this state; and
- (3) have at least two years of structural engineering experience which shall:
 - (A) be gained after obtaining professional engineering licensure; and
 - (B) be progressive in job knowledge and duties related to the design of structural systems; and
 - (C) be obtained under the responsible charge of a licensed professional structural engineer; and
 - (D) include practical design experience in one or more of the following areas;
 - (i) any building or structure two stories and more, or 45 feet in height, located in a region of moderate or high seismic risk; or
 - (ii) seismic retrofit/rehabilitation of an existing building or structure located in a region of moderate or height seismic risk; or
 - (iii) structural design of any other structure of comparable structural complexity
- (4) provide documentation of the experience required by 12 AAC 36.071(3)(D)



Proposed SE Regulation Updates

Regulation Update: Comity for SE License

Currently: Tacked-On to Section on PE Comity Requirements (12 AAC 36.105(h)):

(h) In addition to meeting the requirements of (b)(1) of this section, an applicant for structural engineering registration by comity must have passed an NCEES Principles and Practices of Engineering Examination and the 16-hour NCEES Structural Engineering Examination and have six years of experience with a bachelor's degree or five years of experience with a master's degree. Applicants who have passed the NCEES Structural Engineering I Examination, NCEES Structural Engineer II Examination, or both may be granted a civil engineering registration.

Proposed: New Stand-Alone Section on SE Comity Requirements:

12 AAC 36.108. STRUCTURAL ENGINEER REGISTRATION BY COMITY. Under AS 08.48.191(b), the board, the executive secretary of the board, or its designee may issue a structural engineering certificate of registration to an applicant who

- (a) submits verification of current registration to practice structural engineering in a state, territory, or possession of the United States, the District of Columbia, or a foreign country that is based upon education, experience, and examination requirements that, in the opinion of the board, are at least equivalent to the requirements of AS 08.48 and this chapter at the time the applicant's registration was issued; and
- (b) have passed an NCEES Principles and Practices of Engineering Examination; and
- (c) have passed one of the following structural engineering exams:
 - (1) the NCEES PE Structural Examination; or
 - (2) the NCEES Structural II and Washington or California Structural III exams passed prior to 2011; or
 - (3) the NCEES Structural I and NCEES Structural II passed prior to 2006; or
 - (4) the Western States 16-hour Structural exam passed prior to 2004; and
- (d) have the following education and work experience
 - (1) meet the requirements of the table in 12 AAC 36.103(a)(3) for Professional Engineering registration; and
 - (2) an additional two years of experience working under the supervision of a licensed engineer practicing structural engineering
- (e) submit verification of work experience as follows
 - (1) verification by the signature and seal of the engineer who has supervised the applicant; or
 - (2) if the applicant has been practicing structural engineer as a registered engineer for five years, provide two current letters of reference verifying that experience; and
 - (3) work experience verification and letters of reference shall be provided by individuals who are
 - (A) a licensed structural engineer in a state, territory, or possession of the United States, the District of Columbia, or a foreign country; or
 - (B) a licensed engineer practicing structural design in a jurisdiction where structural engineering is not a separate license; and
- (f) An applicant for engineering registration by comity may submit a council record issued by NCEES to verify the applicant's qualifications, including
 - (1) examination results;
 - (2) education; and
 - (3) registration in another licensing jurisdiction.



Proposed SE Regulation Updates

Path Forward:

- May AELS Board Meeting (tomorrow)
 - Vote to Submit for Public Comment
- Summer 2023
 - 90-day Public Comment Period
- October 2023 AELS Board Meeting
 - Review Public Comments
 - Make Final Updates to Proposed Regulations
 - Vote to Submit to State
- Spring 2024
 - Regulations Approved by State
 - Signed into Law by Lieutenant Governor



SE Exam Transition to CBT

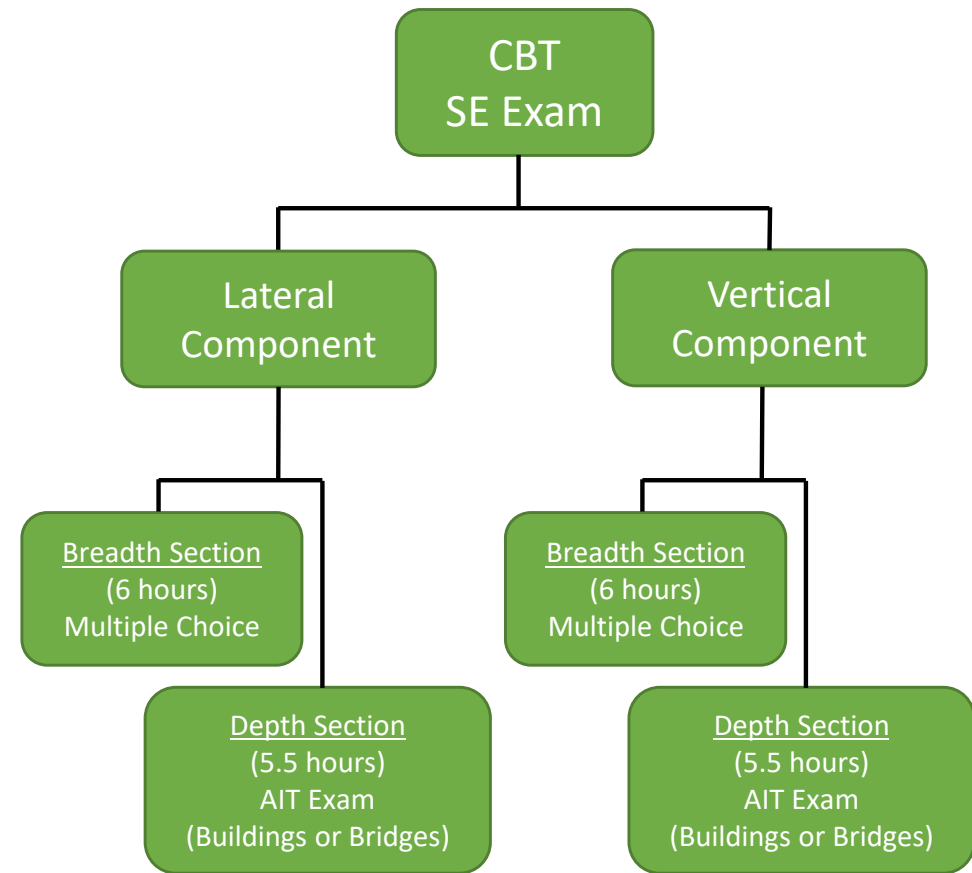
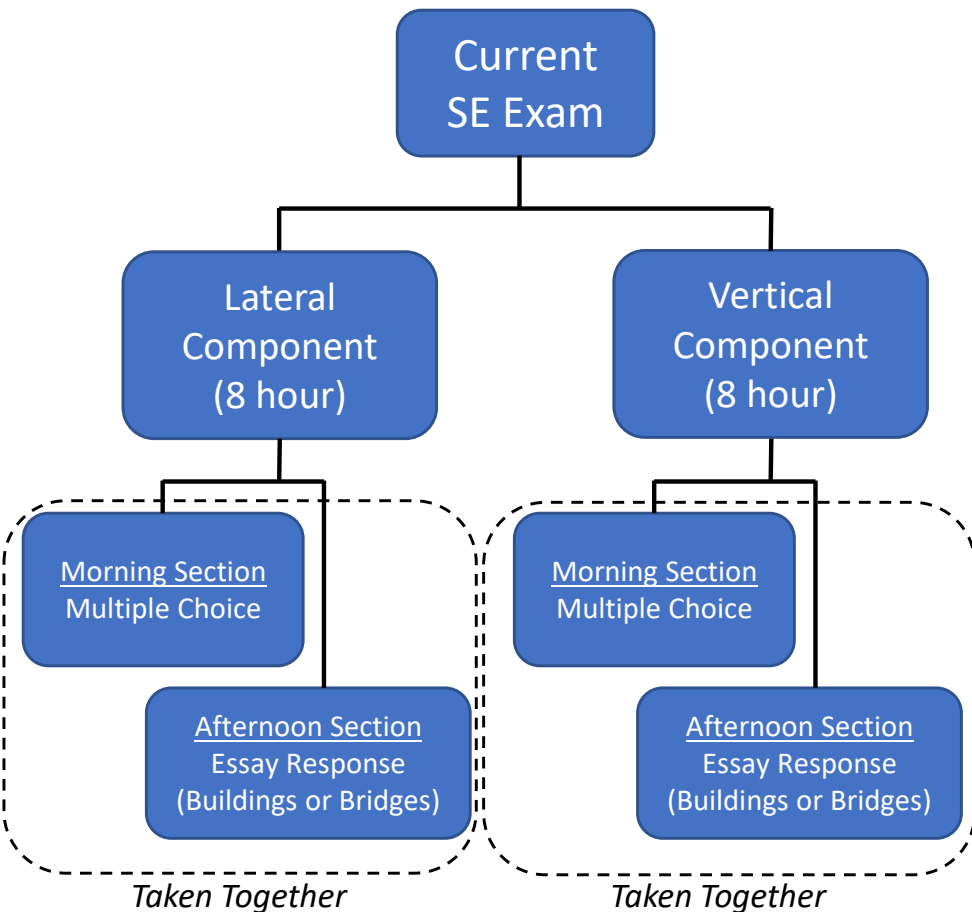
NCEES PE Structural Exam is Changing

- Current Exam
 - Pencil-and-Paper Exam
 - Open Book – Bring your own Library
 - Includes Multiple Choice and ‘Essay’ type Questions
 - Offered 2x a Year on Specific Days
- CBT Exam
 - Exam Taken on Computer
 - Open Book – Reference Material Provided on Computer
 - Multiple Choice and ‘Alternate Item Types’ (AITs)
 - Offered Multiple Times a Year over a Window of Days



SE Exam Transition to CBT

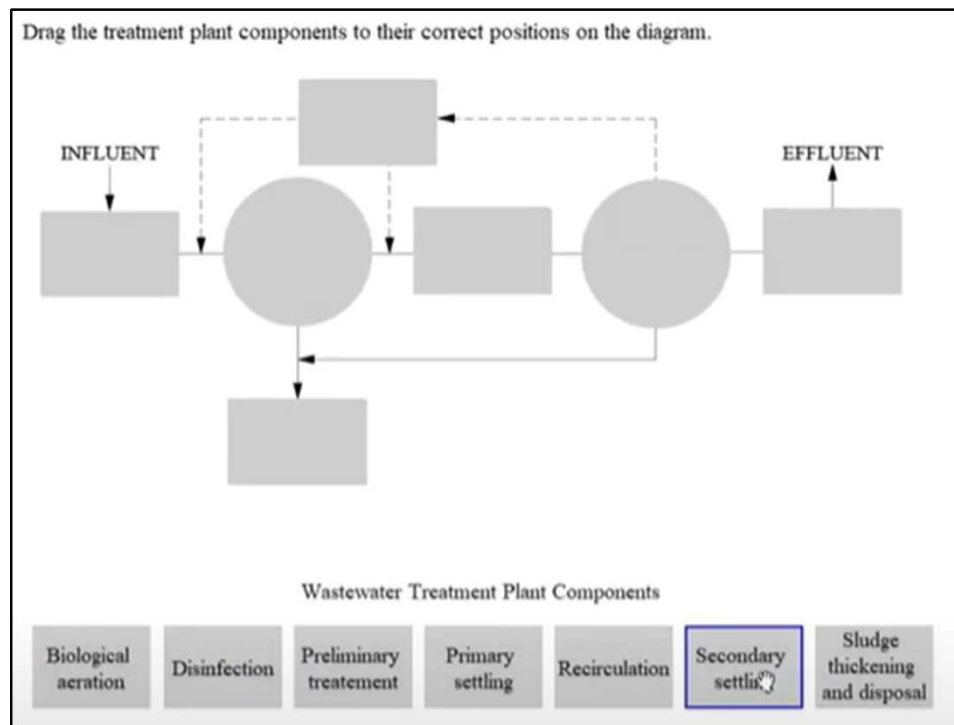
SE Exam Format



SE Exam Transition to CBT

What's an Alternate Item Type? (AIT)

- Multiple Choice with Multiple Correct Options
- Point and Click
- Drag and Drop
- Fill in the Blank





SE Exam Transition to CBT

When is this Happening?

- One More Pencil & Paper Exam
 - October 26 – 27, 2023
- CBT SE Exam Going Live in April 2024
 - Scheduling Details not yet Available
 - Two Testing Locations in Alaska: Anchorage & Fairbanks



Open Discussion

Structural Engineering Licensure in Alaska

- Comments
- Concerns
- Recommendations

