

The NEBRASKA Civil Engineer

Official Publication of the Nebraska Section of the American Society of Civil Engineers

EVENT CALENDAR:

November

18th - Management Group Meeting - Omaha

December

No Meeting -Merry Christmas

ISSUE HIGHTLIGHTS:

From The President

Civil Engineers and Public Policy - ASCE Policy Statements (Part 3)

Status of Structural Licensing Nationally

Structural Licensing in Nebraska

ASCE Group Tours the New Physical Sciences Building on UNL Campus

PRESENTING

November 2008

The Management Group Presents:

"Engineering Politics"

Tuesday, November 18th

Featuring: Senator Tony Fulton, District 29 Senator

Tony Fulton was born and raised in Auburn, Nebraska. He graduated from Auburn Senior High in 1990 and moved to Lincoln to study Mechanical Engineering at the University of Nebraska.

Senator Fulton has been employed in various capacities as a mechanical engineer in the past decade, however in 2003 he founded a business dedicated to caring for the elderly. He was able to turn this deeply satisfying experience into a business with the founding of Guardian Angels Homecare. His company presently employs about 90 persons in and around Lincoln.

In November of 2006 Governor Heineman announced the appointment of Tony Fulton to succeed Mike Foley in the Nebraska Legislature. Fulton was sworn in as District 29's senator in January of 2007. Senator Fulton has quickly become a leader in the Unicameral serving on the powerful Appropriations Committee as a freshman and as vice-chairman of the Building Maintenance Special Committee. He was also appointed by his colleagues to the Legislature's Select Committee on Gender and Minority Equity.

Location: Fox and Hound English Pub & Grill

506 N. 120th Street (120th and Dodge), Omaha

Times: Social Hour 5:30

Dinner 6:30 Meeting and Presentation 7:30

Menu: Campfire Pot Roast w/ mashed potatoes - \$22

Newcastle Fish & Chips w/ steak fries - \$16 Grilled Chicken Platter w/ rice - \$17

Entrees include Salad and choice of ice tea or soda. Spouses and guests are welcome. Price is \$10.00 without meal. Student meals FREE. RSVP by 12 PM Thursday, November 13th to **rsvp@neasce.org**. Please include your meal selection. Subject Line: ASCE RSVP

Deadline for articles to be published in the January newsletter will be December 22nd. Email articles to Aaron Grote at editor@neasce.org

THE NEBRASKA CIVIL ENGINEER

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From the President

November is here, and election season is nearly over (or may be, by the time you are reading this). In light of that, it might be interesting to share some statistics regarding political involvement in our country.

As of 2000, the average Congressional District had 646,000 residents. Of these, 26% are not of voting age and another 25% are not registered to vote - already 51% of the 646,000 are not participating in the process. One-third (1/3) of those registered to vote (17% of total population) do not vote. This effectively leaves 33% of the district's population deciding any given election. In a hypothetical close election (17% for the winner, 16% for the loser). about 1/6 of the people decided who would represent them. Of the 17% who elected the winner, likely only 1% to 3% were involved by volunteering their time and/or contributing their money. When it boils down to it, somewhere between 1,000 and 3,000 people - at best - were key in the candidate's victory. With a little effort, anyone can be part of this group that is relied on for advice and counsel. Make sure to do your part!

On October 15, the Nebraska Section hosted two town hall meetings (for any interested

- Marie Maly, P.E.



Marie Maly, P.E. President of ASCE

parties) to discuss the professional issue of raising the bar. Dale Jacobsen shared some background and basic information on the subject, and Mike Conzett, from the Nebraska Board of **Engineers and Architects and** Chair of the NCEES Engineering Education Task Force, updated everyone on the effort from a licensing standpoint, including national information. Then, meeting attendees had an opportunity to ask questions and discuss. We hope that these meetings gave a wide variety of engineers in the area the opportunity to learn more enter into positive dialog on the topic.

Thank you to Wayne Jensen, our Construction Chair, who planned a great tour of UNL's new physics building for the October Section Meeting. It was interesting – especially for those of us who do not work with building

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design. We had a nice turnout, with students and professionals learning more about the LEED certified building and its construction process.

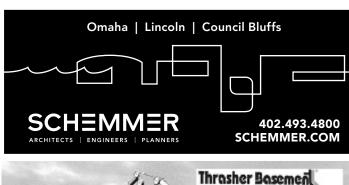
Please join us on Tuesday, November 18 at the Fox and Hound (120th & West Dodge, Omaha). Sen. Tony Fulton, the only engineer currently in the Nebraska Unicameral, will be speaking about his experiences as an engineer legislator. We would love to have a great turnout, as the presentation will work nicely with our overall challenge for the year to increase your level of involvement in the public policy process.

The Nebraska Section takes the month of December off, but we will be back to monthly Section meetings in January, with the joint Nebraska Section-UNL Student Chapter meeting. It is scheduled for Thursday, January 15, so mark your calendar now and plan to attend!

September Meeting Hosted by the Structural Group

Thanks to Wayne Jensen for hosting the October Meeting. The names listed velow can be considered official documentation of attendances at the October meeting worth 1 PDH credit.

Sarah Schroeder Gregory Arthur Mike Sklenar Ray Moore Cassie Vogel Steve Nickel Ed Prost Bruce Fischer Marie Maly Jeff Kopocis Mike Florek
John Coburn
Wayne Jensen
Paul Harmon
John Hill
Aaron Buettner
Diane Jones
Kristi Nohavec
Brian Havens









Status of Structural Licensing Nationally

On July 17 - 18, 2008, structural engineers from around the country met at ASCE/SEI's headquarters in Reston Virginia for the 4th National Summit on Separate Licensing of Structural Engineers. More than 28 states were represented at this summit including Nebraska. For the first time, the Structural Engineers Association of Nebraska (SEAON) sent representatives to the summit. Due to the recent history in Nebraska with the Title Act, SEAON thought this topic was important, therefore, sent two representatives, Pete Vaccaro and Jeff Stevens, to represent Nebraska.

The purpose of the licensing summit was to bring together leaders from local structural engineering groups from around the country to discuss strategies which local groups may use and collectively develop materials to support local efforts for separate SE Licensing in their State. The summit went over the history of licensing of structural engineers, recent case histories from states passing separate SE licensing laws, and group discussions.

At the summit, Sam Rihani, the ASCE Chair of the SEI Professional Activities Committee, started the summit by giving a brief overview of the past summits in 2000, 2002, and 2004. After that, Gene Corely, the president of the National Council of Examiners for Engineering and Surveying (NCEES), gave an overview of the history of separate SE Licensing in the United States. The history began with the Great Chicago Fire of 1873. This became the catalyst for change because the rebuilding of Chicago from 1873 to 1890 attracted a lot of "fools and scoundrels" who attempted to design structures in Chicago. In response to their actions, the Illinois legislature passed the first design professional act in 1897 for Architects. In 1907, Wyoming passed the first professional engineers act followed by Louisiana in 1908 over water rights. At that time, reports were being written by anyone and this was an attempt to control those people. Finally, Illinois passed the first Structural Engineers Act in 1915.

This brief history led to recent case histories from Barry Arnold with ARW Engineers of Ogden, Utah, Ed Huston with Smith & Huston Inc. of Seattle, WA, and Doug Meltzer with BMGP Engineers of Salem, Oregon. In their presentations, they gave strategies, presented problems, went over the legislation, and addressed grandfathering in each of their states. Each state developed and passed legislation with very different grandfathering clauses and requirements for when a structural engineer is required as the engineer of record.

For example, Utah requires an affidavit stating that the applicant has been active and has no action against his/her license in the practice of structural engineering before granting the title of structural engineer. In contrast, Washington requires that the applicant must demonstrate to the state board that they have at least two years of sufficient experience in the duties typically

provided by a professional structural engineer regarding "significant" structures before granting the SE title. Applicants who are PE's who do not meet this requirement would not be allowed to design "significant" structures.

Grandfathering was a sensitive issue for both Utah and Washington. In Utah, the term was revised to "transition clause" and in Washington the term "grand parenting" was used. These revisions created a more attractive bill for many interested parties. The contrast between the states was also apparent in the supporters of the respective bills. In Utah, the state DOT was opposed to separate licensure while in Washington, the state DOT negotiated a more restrictive statute and its enforcement. Beginning in the late 1960's, Oregon tried to pass legislation for separate structural licensure twice but failed. Finally after experiencing two moderate earthquakes in 1993, the bill was sponsored by the legislative committee chair and passed in 1999. After the presentations of case histories, Cheri Leigh, a principal of Leigh and O'Kane, of Kansas City, Missouri and former member of Missouri's licensing board, discussed how professionals can work with their state licensing board when addressing separate licensing. She went over the purpose of the licensure, specific state board issues, board obstacles, and how to possibly address your licensing board.

Ms. Leigh explained that for a state board to support a legislative change, a strong present or future need must exist. Without such need, the profession is left to "lead the charge" to promote the passage of new legislation. Having positive dialog with the board, using model law language and exercising patience are major assets in this endeavor. A particular state board may be more or less willing to work with the profession depending on the attitudes and professions of its members, the influence of a particular lobby or other organizations, the willingness of the board to assume additional duties, budget issues and the desire of the board to work for legislation.

Susan Jorgensen, the principal of the Denver office of Leo A Daily and current NCSEA licensing committee chair presented on why there should be separate licensure needed in each state. She explained that separate licensure would help protect the health, safety, and welfare of the public. It would help protect the public from unqualified professionals, inexperienced professionals, professionals not current with the codes and changes, inadequate structures, and costly failures. Also, separate licensure should be obtained due to complexities of structures, building materials, codes and specifications, and computer programs. She went on to state that less time, budget, and training is a benefit to separate licensure. Additional benefits to separate SE licensure are state-to-state mobility, less confusion to the public, insurance reductions, recognition by building officials, ease of licensing, and reduced discipline cases. Susan ended her presentation by stating that above all else the reason for separate licensure was to protect the public.

After Susan's presentation, John Shipp, a managing engineer of building and structures for Exponent Engineering and Scientific Consulting of Irvine, CA discussed the difference between a Title

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Structural Licensing in Nebraska

After attending the Licensing Summit in Reston Virginia, it is clear that there is a national trend to pursue separate licensure (Practice Acts) for structural engineering in each state. Structural Engineers deal with life safety issues on a daily basis more than any other discipline, therefore, the national trend for separate licensure for structural engineers is gaining attention. With this in mind and knowing that the licensing exam to become a structural engineer in the state of Nebraska will change in April 2011 to one 16 hour exam, I encourage all professional engineers practicing structural engineering to think about the future.

Currently, professional engineers licensed in Nebraska prior to January 1, 2007, may make application to the board for licensure as a Professional Structural Engineer if certain requirements are met. The application review process may take up to 90 days and will be conducted with the assistance of a volunteer Structural Engineering Subcommittee appointed by the board to evaluate the applicant's experience. The provision for obtaining a structural engineering license by equivalency expires January 1, 2011 and the cost for application is \$300.00. An engineer applying for equivalency should be aware that this process is only good for the State of Nebraska. If the applicant wishes to obtain reciprocity in another state, that state may not accept these provisions for licensure as a structural engineer.

Another way of obtaining licensure as a Structural Engineer (S.E.) in Nebraska is to take and pass the Structural II (SE-II) exam. Professional engineers who have taken and passed the first eighthour component of the NCEES Structural Engineering exam or a professional engineering exam given by an NCEES jurisdiction with emphasis in structures prior to and including the March 1992 examination may make application to take the Structural II (SE-II) exam. Currently, the Nebraska State application fee is \$30.00 with an additional \$745.00 application fee to ELSES to take the SE-II exam. Therefore, the total cost to take the SE-II exam will be approximately \$775.00. According to NCEES, this fee is to cover the administration cost and the cost of correcting and grading the exam. NCEES has indicated that it is possible that the cost of this exam will keep going up over the next few years. The benefit to taking the SE-II exam verses the process of equivalency is that this exam is widely accepted by other states for reciprocity.

Therefore, professional engineers who are practicing structural engineers should keep in mind the cost of the application fee, the process, and reciprocity while evaluating their options for licensure as a Structural Engineer (S.E.) in the State of Nebraska.

By Peter Vaccaro SEAON Licensing Chairman

Civil Engineers and Public Policy - ASCE Policy Statements (Part 3)

A policy statement is a broad overview of policy on a topic of continuing concern to the civil engineering profession. ASCE has 163 policy statements on a variety of topics. This month, we will take a look at the Government, Procurement/Contract Issues, International, and Legal Reform policy statements. All summaries indicate something ASCE supports unless otherwise noted. For more information, see: https://www.asce.org/pressroom/news/policy.cfm.

Government

PS 416: Government Engineering Management Positions. The selection and appointment of qualified professional engineers to government positions requiring professional engineering knowledge for operational or management decisions.

PS 393: Post Public Sector Activities. The establishment of reasonable policies and statues at all levels to control potential conflicts of interest with former government employees.

PS 346: Professional Grade Salary Structure for Government Engineers. Professional grade salary structures for government PEs and a dual career ladder (technical/non-technical administrators) comparable to the private sector.

PS 386: Recruitment and Retention of Qualified Engineers for Government Service. Personnel policies/packages to attract, develop, and retain engineers who can perform at a high level of service in the public interest. Suggestions included.

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Act vs. a Practice Act. A Title Act allows a licensed engineer to employ a particular title such as Structural Engineer and thus use certain initials such as S.E. after their name. It does not place restrictions on practicing. On the other hand, a Practice Act defines the specific type of work that a licensed engineer in that discipline can legally perform along with the corresponding responsibilities and liabilities. He went on to state that currently trends in SE Licensure by state are increasing. Currently, Illinois, California, Hawaii, Washington, Nevada, Oregon, Guam, Idaho, Arizona, Nebraska, Utah, Louisiana, and Northern Mariana Islands have some type of structural title or practice licensure.

The final presentation was given by Greg Brandow, the president of Brandow & Johnston, Inc of Los Angeles, CA. He discussed the work of the structural task force set up by the NCEES to evaluate the existing structural exams, consider modifications to the NCEES structural exams, and make recommendations. One of the problems the task force experienced were that there are four different structural engineering examinations that are currently accepted. The Civil/Structural Exam, SE-I exam, SE-II exam, and state run SE-III exam (California and Washington). Therefore, several questions and confusions arose. As a result, the task force recommendations were to have one modernized 16 hour structural examination with two 8 hour components that would be adopted by all jurisdictions that would license structural engineers. Passing of a single 8 hour component of the two-component, 16-hour structural examination would not be sufficient for passing. The format of the examination would be modernized and brought into step with the new building codes. This new 16-hour structural exam will be put into use by April 2011.

After the formal presentations, the discussion moved to grandfathering clauses, which types of structures should a structural engineering license be required and how to respond to concerns voiced by those opposing separate licensure, and expanding on why separate structural licensing is needed.

The summit was concluded by Sam Rihani, the ASCE Chair of the SEI Professional Activities Committee, by emphasizing ASCE Policy Statement 524 which supports post-PE credentialing and advising summit attendees to keep working on title and practicing acts and to determine the optimal time to pursue them.

By Peter Vaccaro SEAON Licensing Chairman

ASCE Group Tours the New Physical Sciences building on UNL Campus

On October 16, 2008 the Nebraska Chapter of the American Society of Civil Engineers toured the new physical sciences building under construction on the UNL campus. The tour was conducted by Harmon Conner, the project manager for the general contractor, Sampson Construction. The new building is five stories of steel frame construction with moment resisting joints. Construction began before design was completed, which resulted in numerous change orders as construction progressed. The tour began in the basement, which will house faculty offices and classrooms, and proceeded upward to the highest level where the telescope for the Physics Department will eventually be mounted. Construction work on this project has experienced several delays, primarily due to problems obtaining materials in a timely manner and the unusually wet weather. Sampson Construction hopes to have the project enclosed by November 8th so that construction can continue during the winter months.

By Wayne Jensen

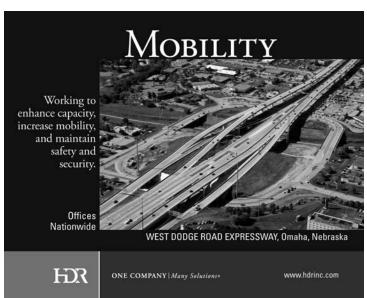


- The ASCE group tours the new UNL Physical Sciences building under construction













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