

The NEBRASKA Civil Engineer

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

EVENT CALENDAR:

September

18th - Structural Group Meeting - McKeena's Blues Hall - Omaha

19th - Structural Conference

- Scott Conference Center
- Omaha

October

16th - Construction Group Meeting - UNL Campus - Lincoln

November

20th - Management Group Meeting

ISSUE HIGHTLIGHTS:

From The President

Introduction to Engineering Outreach Kits

Civil Engineers and Public Policy - A Challenge for Nebraska Civil Engineers

ASCE Policy Statements

PRESENTING

September 2008

The Structural Group Presents:

"Pacific Street Bridge over I-680"

Thursday, September 18th

Featuring:

Karl Burns, Project Manager - District 2, Omaha **Marty Weander**, Project Manager - District 2, Omaha Nebraska Department of Roads - Lincoln, NE

Pacific Street Bridge over I-680

This multi-phased 196'-0" long 2-Span Concrete Girder Bridge (NU900) project has a Post tensioning Bridge Deck and was constructed under time restrictions.

*See Speaker Bios on Page 3

Location: McKenna's Blues Hall

7425 Pacific Street, Omaha 68114

Times: Social Hour 5:30

Dinner 6:30 Meeting and Program 7:30

Menu: Smoked Brisket, steamed veggies, and baked potato

Roasted Chicken, pasta medley, and rice pilaf

Smoked Pork Loin, steamed veggies, and baked potato

Entrees include corn on the cob and your choice of pop, iced tea, or coffee. Spouses and guests are welcome. Meal price is \$16.50 per person or \$10.00 without meal. Student meals FREE. RSVP by 12 PM Tuesday, September 16th to rsvp@neasce.org. Pleaseinclude your meal selection. Subject Line: ASCE RSVP

Deadline for articles to be published in the October newsletter will be September 25th. Email articles to Aaron Grote at editor@neasce.org

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From the President

Greetings and welcome to another year with the Nebraska Section!

I hope you had a great summer – it always seems to go by too quickly. While you were relaxing, some your fellow Section members were hard at work getting ready for this year.

I'd like to welcome Paul Dierking, Joe Flaxbeard, Wayne Jensen, Mark Meisinger, Ticha Perez, Mark Pohlmann, and Liz Roesler as first year members of the Section Board. The Board met for the first time on August 14. We discussed everything from future meeting dates and conference opportunities to the newsletter and the grants we received last year. If you ever have a topic you feel the Board should know about or discuss, please let us know. Our contact information is available on the website (www.neasce.org) or in this newsletter.

Our first Section meeting of the year is Thursday, September 18. The Structural Group will be hosting the meeting, and we hope to see you there – the presentation on the Pacific Street bridge replacement over I-680 is bound to be interesting, especially if you spent all summer driving an alternate route. The Structural Conference will follow on Friday, September 19. This annual event usually draws around 200

- Marie Maly, P.E.



Marie Maly, P.E. President of ASCE

attendees and is co-hosted by the Nebraska Section, SEAON (the Structural Engineers Association of Nebraska), and the University of Nebraska.

If you're looking for other ways to get involved, see the articles in this newsletter regarding our new outreach kits and public policy challenge for the year. Feel free to contact board members, too – they would welcome your ideas or assistance. And mark your calendars now – unless there's a major conflict, our meetings will likely fall on the third Thursday of the month (Sept.-Nov., Jan.-May). See you on the 18th!

Key Contacts Get Involved!

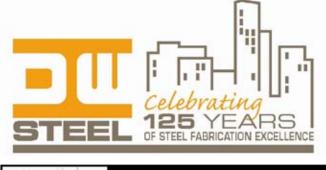
First challenge for raising your level of involvement: join the Key Contacts! ASCE Key Contacts are on the front lines by delivering the message to our elected leaders that something must be done about America's crumbling infrastructure. As a Key Contact, you will receive the resources you need to stay informed on the issues and know when your expertise as a civil engineer is needed to influence public policy. You will receive This Week in Washington and Key Alerts. These informative emails are the backbone of the Key Contact Program, providing you with key information when you need it. This Week in Washington will arrive in your email inbox every Friday with brief updates on key issues affecting civil engineering at the federal and state levels. Key Alerts arrive when specific action is needed to support civil engineering issues. You can choose to use the information to educate others or contact our legislators. However, there are no requirements for the program, and the emails are a great way to stay informed. Visit http://www.asce. org/keycontacts for sign up online and start getting involved.

Speaker Bios

Karl Burns is currently a project manager for the Nebraska Department of Roads and has held several inspector positions. Karl started his career in 1984 at Wayne in District 3 and transferred to District 2 in Omaha at the beginning of the rebuilding of Interstate 80 thru Omaha. In 2000 he was promoted to Highway Project Manager and is responsible for Public Relations and Permit Plan Reviews for the District. The most notable project which Karl handled the public relations on is the West Dodge Elevated Expressway which recently received an "America's Transportation Award" from the American Association of State Highway and Transportation Officials (AASHTO).

Marty Weander has worked for the NDOR for 25+ years. In 1996 he was promoted to the position of District Survey Coordinator. In 2000 Mr. Weander was promoted to Highway Project Manager. Notable projects include West Dodge Road and Hwy 31 Interchange in Elkhorn, West Dodge Road into Hwy 275 at Waterloo and is now the Project Manager of the Pacific Street Bridge project.







Introduction to Engineering Outreach Kits

Looking for a way to explain engineering?

Have you been invited to talk about engineering at your child's school? Are your Scouts trying to earn an engineering-related merit badge? Do you volunteer at an after-school or summer program?

If you have any reason to share engineering with students between first and eighth grades (or maybe even older), the Nebraska Section can help!

Outreach Kits Available – Check One Out Today!

Outreach Activity Kits

Three kits are prepared to appeal to a variety of age groups, though activities can sometimes be fun for all ages. Each kit includes leader guides, handouts, materials to complete the activities, and certificates for the kids – all packaged in an easy-to-carry bin!

Kit #1 - Zoom Into Engineering

(Grades 1-6)

Flinker, Gumdrop Dome, and Paper Tower

Kit #2 - Building Big

(Grades 5-8)

Hands on Glossary, Straw Shapes, Paper Bridge, and Suspension Bridge

Kit #3 - Mixed Activities

(Mixed Ages)

Paper Tower, Straw Shapes, Hang Time, and Blow It Away

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Building Big Video Series

(Grades 4+) This DVD set includes five hour-long episodes (Bridges, Dams, Domes, Skyscrapers, Tunnels) from the highly acclaimed PBS special *Building Big*. The series explores the creators and builders of amazing structures while revealing both triumph and disaster.

Bridge Kit

To learn about structures, students become the builders for a six foot long bridge that will support up to 150 pounds. Yes, that means that the builders will have an opportunity to climb through the truss when it's complete.

How Do I Borrow Outreach Activities?

- ► Contact the Section (contact info on the left).
- Let us know which materials you need and when you would like them.
- ► Explore the kit on your own and then have fun sharing it with others.
- ► Return the kit and let us know about your experiences.

IEDDASKA SECTION

Civil Engineers and Public Policy – A Challenge for Nebraska Civil Engineers

During the course of this year, our Section is going to learn why Civil Engineers are indispensable in the public policy process and how each and every one of us can get more involved. For starters, I'd like to give a brief overview of the thoughts I shared at our Annual Section Meeting last May. We need three things as we learn how to be a necessary part of the process on any level, be it locally or nationally.

Information

Did you know that ASCE has 163 policy statements on topics ranging from contract issues to space? No one can speak on ASCE or the Nebraska Section's behalf unless their statement is in agreement with the Society's policy statement on the subject. Over the course of the year, we'll be sharing information with the Section about many of these policy statements. Other sources of information you'll learn more about:

- Federal and State Priority Issues the results of ASCE's annual issues survey
- Infrastructure Action Plan a "checklist" for Congress to accomplish each session
- This Week in Washington an email sent to Key Contacts
- Raising the Bar for Civil Engineering proposed changes to licensure requirements
- The Professional Engineers Coalition a group of engineering societies that monitors activities in the Unicameral

Intelligence

Engineers are great at having intelligent discussions, and this is exactly what we need as we learn about being more involved in government relations. When you combine the education and experience of a practicing engineer with the information we just talked about, there's a lot of room for great conversation. Hopefully, these opportunities will lead to intelligent decisions on a variety of topics. Armed with these convictions, Civil Engineers can be great advocates – for the profession and for the public's best interest.

Involvement

My challenge for you this year is to increase your level of involvement. Here are some ideas to get you thinking about where you're starting from and where you can go (because the sky's the limit!).

- Register to vote and then do so
- Join ASCE's Key Contacts program
- Follow the Unicameral's activities as the relate to engineering with PEC's help
- Send your legislator(s) email with ASCE's "Click and Connect with Congress" website – or make a phone call to their office
- Help Raise the Bar for Engineering
- · Meet with one of your legislators
- Learn about Nebraska on the Move and help the Section become active with this coalition
- Call Scott Gilliland to offer your assistance on the State Report Card for Infrastructure (more on this soon)
- Participate in ASCE's Legislative "Fly In" to Washington DC
- Attend a "How to Run for Office" workshop cosponsored by ASCE and Scientists and Engineers for America

Civil Engineers are concerned with the health, safety, and welfare of the public. If we don't put our expertise to use in shaping our county's public policy, our legislators are missing out on very important knowledge. You'll see benefits from your involvement, too – you'll meet new people, be exposed to new ideas, learn new things, and be sought after for advice. Better still, a well rounded, engaged citizen engineer is a good role model – for our younger and future colleagues... and for our children.

Civil Engineers and Public Policy – ASCE

Policy Statements (Part 1)

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 Infrastructure and Engineering Practice policy statements. All summaries indicate something ASCE supports unless otherwise noted. For more information, see: https://www.asce.org/pressroom/news/policy.cfm.

Infrastructure

PS 404: Endorsement of Infrastructure Projects. ASCE (on a Society level) may endorse/oppose specific projects only if it has national implications.

PS 453: Federal Capital Budgeting. The establishment of a federal multi-year capital budget for public works infrastructure construction and major rehabilitation.

PS 131: Growth and Development. Incorporating urban scale and form, diversity of land use and good engineering design; balancing individual/community and natural/built environments.

PS 299: Infrastructure Improvement Policy. Federal/ state/local actions to fund infrastructure should support sound program management, innovative financing, and appropriate research/technology transfer.

PS 493: Infrastructure Security and Survivability Research. Research efforts and national standards in support of design/construction initiatives to protect infrastructure against disasters.

PS 452: Investing in America's Schools. Regular construction and maintenance programs, as well as research and development, are needed to ensure a sound future.

PS 451: Life-Cycle Cost Analysis (LCCA). Include construction, operation, maintenance, environmental, safety and other costs anticipated, regardless of who is financially responsible.

PS 503: National Parks Infrastructure. Immediate and sustained federal action to reinvest in National Parks, Monuments, Battlefields, and other preserves.

PS 500: Physical Infrastructure Security. A multi-faceted effort to increase the reliability and survivability of infrastructure against man-made and natural hazards. PS 526: Public-Private Partnerships (PPPs). Use PPPs only when the public interest is protected and four specific criteria are met. Governing agencies should develop additional criteria.

R 514: Reconstruction of New Orleans and the Gulf Coast.

Three specific activities for sustainable reconstruction. (This is a Resolution because it is a short term position.)

PS 427: Regulatory Process for Infrastructure Development. Create strategies to streamline the regulatory process for projects at all levels. Three recommended strategies are included.

PS 418: The Role of the Civil Engineer in Sustainable Development. Implementation strategies to educate engineers and find innovative ways to achieve sustainable development (which is defined).

PS 518: United Definitions for Critical Infrastructure and Sensible Security. Definitions for critical infrastructure, safety, security, sensible security, multihazards, and disaster resilience.

Engineering Practice

PS 117: Aesthetics. Aesthetics are integral to good engineering design and should be included in budgeting.

PS 510: Combating Corruption. Zero tolerance toward bribery, fraud, and corruption in engineering and construction. ASCE actively supports the global effort to stem corruption.
PS 333: Engineering Surveying Definition. Surveys for the location, design, construction, operation, and maintenance of engineered projects; not boundary, right-of-way, or cadastral.
PS 502: Professional Ethics and Conflict of Interest. An engineer's judgment must be above reproach, the ability to exercise independent judgment should not be compromised by any organization's rules, engineers must maintain their independence and avoid potential conflicts of interest, and engineers should not be subject to discipline for holding the public's interest above all others.

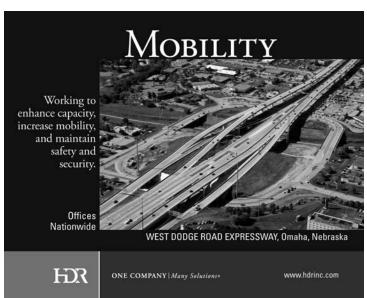
PS 437: Risk Management. Government agencies and private entities should incorporate scientific risk management in decision-making that affect the public's safety, health, or welfare. Recommendations are provided.

PS 433: Use of the Term "Engineer." ASCE believes that in order to use a title or designation including "engineer," the individual should be a graduate of an accredited program with an engineering degree, registered as a P.E. or E.I. / E.I.T., or holder of an official ruling under the Taft-Hartley Act. This does not prohibit the use of "engineering" as a modifier (e.g. "engineering aide"). ASCE encourages registered professionals to use their P.E. title on all professional communication where permissible and appropriate.













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