Many thanks to Hoyle, Tanner, our JANUARY SPONSOR OF THE MONTH!

Local Update
Our next meeting is the joint breakfast meeting with ACEC-NH. The new NHDOT commissioner Victoria Sheehan will be joining and presenting the state of the DOT. The meeting will be at the Currier Museum of Art which is a very unique and interesting venue. Sign up now and join us for this great event. For sign up information please visit our website at www.ascenh.org.

We are also updating our newsletter, so if you wish to continue receiving hard copies please send in the request form which is in the January newsletter. The new look newsletter will debut in February.

National Update
As you know by now, Congress approved the $305 Billion highway bill (FAST ACT) to fund highway repair and expansion for the next 5-years. The bill passed the House by a vote of 359-65 and the Senate by a vote of 83-16 a true show of bipartisanship. This bill is long overdue but it shows what can happen when both sides of congress drop the politics and realize the importance of infrastructure funding to the economy. When we attended the ASCE legislative fly-in last spring in Washington D.C., thoughts of long term transportation funding were dire and it looked like short term extensions were going to be the norm for the foreseeable future.

So how did our elected officials vote? Senator Ayotte, Senator Shaheen, Congresswoman Kuster and Congressman Guinta all voted for the bill. On behalf of ASCE, we want to extend our gratitude and thank them for voting in favor of this bill and realizing the importance of this funding to the state of New Hampshire. I also want to thank Darren Benoit (McFarland Johnson), Tony Puntin (Beta), and Andrew Wells (University of Delaware) for their tireless efforts lobbying their representatives and media outreach to continue to keep this issue in the forefront. They have sent emails, posted updates on social media, taken numerous trips to Washington D.C. to meet with legislators and done several radio interviews to get the word out. There are others out there that have done their part and I thank them all. Please take a moment to write an email and thank your legislators.

Continued page 2
What does this mean for NH? The Department of Transportation will receive an average of $15 million per year for the next five years. This will allow the department to plan for multi-year projects and not have to worry if the money will be there. Prior to passing the resolution in early December, congress had granted 34 short-term extensions which kept the department going but prevented them from long-term planning. Ironically, the department recently issued a ten year plan to the Governor’s Advisory Commission on Intermodal Transportation (GACIT) which gives the department a jump start on long term infrastructure planning in the state.

If you have any questions or comments please feel free to drop me an email at jay.hodkinson@gza.com.

Jay Hodkinson, P.E. is a Senior Project Manager with GZA GeoEnvironmental, Inc. He earned his B.S. degree in Civil Engineering from the University of Massachusetts-Lowell. He lives in Londonderry, New Hampshire with his wife, Chrissy and his children Andy and Lindsey.
Careers for a Better Future at Hoyle, Tanner & Associates, Inc.

Hoyle, Tanner’s motivated staff of nearly 100 engineers, planners, technicians, inspectors and support personnel is ever evolving and adapting to meet the constantly changing needs of our clients and communities. We provide technical services in the fields of water resources, transportation, site development, structures and environmental permitting. Our team of professionals includes noted experts in their fields who are routinely invited to share their knowledge in journals and at conferences.

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To learn more the exciting career opportunities awaiting you at Hoyle, Tanner, visit www.hoyletanner.com.
ACEC-NH/ASCE-NH Breakfast Meeting with NHDOT Commissioner

Greetings!

Please join ACEC-NH & ASCE-NH for our annual breakfast meeting on Wednesday, January 6 at the Currier Museum of Art. Our guest speaker for the event is NHDOT Commissioner Victoria Sheehan.

The event includes a networking hour, a full breakfast, and 1 PDH for attendance.

Get more information

Register Now!

I can't make it

We look forward to seeing you at the event!

Sincerely,

ACEC-NH and ASCE-NH

When
Wednesday January 6, 2016
from 7:30 AM to 10:30 AM EST
Add to Calendar

Where
Currier Museum of Art
150 Ash Street
Manchester, NH 03104
UNH-EWRI Panel Discussion: Part II  
By: Thalia Valkanos

Each semester, the University of New Hampshire (UNH) Student Chapter of Environmental & Water Resources Institute (EWRI) holds several panel discussions with various themes (i.e. types of engineering jobs, research at UNH, human resource representatives from engineering companies, etc.). On the evening of December 3 at UNH’s Gregg Hall, the Chapter hosted a panel discussion with professionals and students on the topic of graduate school. Approximately 25 students gathered to listen to the following five individuals who volunteered their time for the panel:

Dr. Thomas Ballestero  
Professor at the University of New Hampshire. Received his BS and MS degree in Civil Engineering from Pennsylvania State University. He earned a PhD in Civil Engineering with a hydraulic focus from Colorado State.

Mike Kotowski  
Current Masters of Engineering student at UNH and part-time employee at VHB.

Dovev Levine-Leung  
Academic Counselor and Admissions Officer for the UNH Graduate School and Research Associate for the UNH Sustainability Institute.

Aly Packham  
Current Civil Engineering Masters student at UNH.

Thalia Valkanos  
Current Environmental Policy graduate student at the University of Massachusetts Dartmouth and fulltime employee at GZA GeoEnvironmental, Inc.

The panel began with a short introduction by each guest speaker and the remainder of the hour was spent on Q&A from the students. All of the panelists provided an overview of their respective experience with graduate schools, including their perceived benefits and challenges of enrolling either immediately after undergrad or taking time off before enrolling. The event was a great success and the panelists remained several minutes after the session was over to personally answer additional questions from students.
Photo Gallery

Younger Members Annual Volunteer Night
New Horizons of New Hampshire

Younger Members Annual Bowling Night
RESEARCH FINDS GOOD JOBS ARE INDEED GROWING

By Kevin Wilcox

A Georgetown research team finds that the U.S. economy created a surprisingly high number of good jobs between 2010 and 2014, many in STEM fields.

Researchers at Georgetown University's Center on Education and the Workforce have found that during the protracted recovery from the Great Recession, the U.S. economy created more high-quality jobs than headlines over that period—which emphasized the addition of only lower-paying jobs—might have indicated.

"Those low-wage stories ran counter to what we know about cyclical patterns and long-term economic trends," says Tamara Jayasundera, Ph.D., a research professor at the center and one of the authors of the recent report "Good Jobs Are Back: College Graduates Are First In Line." The report defines "good jobs" as those that pay more than $53,000, which is 26 percent above the median for full-time workers in the United States.

Jayasundera notes that these good jobs tend to be the first added during an economic recovery as employers fill professional and managerial positions in advance of an expected expansion. Additionally, "over the long term, employers have been hiring more educated, highly skilled workers," she says. "And the college wage premium...has been growing since the 1980s. We truly wanted to figure out what is going on."

To examine the discrepancy between what was commonly reported about new low-wage jobs and the nature of the jobs that were actually added, the team used data from the Current Population Survey, a joint effort by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics, which includes employment information about U.S. workers, compiled monthly. That data was complemented with a more detailed annual supplement collected by Census Bureau each March. The researchers found that the common misperceptions were often based on research that grouped jobs by the industries creating them rather than the actual types of jobs that were being created. For instance, the hospitality and leisure industry has a high percentage of low-paying jobs, and thus a lower average salary for the industry, and so more jobs in that category were often reported as more low-wage jobs. Yet that field also provides many high-paying jobs—for example, managerial and financial professionals.

When the team examined the data by grouping the jobs by occupation, they found that the jobs being created were actually those with higher wages and good benefits, such as those in the managerial, professional, and technical fields.
"When you look at occupation, [which] is categorized by the skills you need and the work you do on the job—[and] is very closely tied to the wages you earn—44 percent of job growth was happening among good jobs," Jayasundera says. "There is growth at every level—and low-wage jobs are also growing. However, low-paying jobs are not the overwhelming majority."

Of the 6.6 million jobs added during the recovery, 2.9 million were these good jobs, compared to 1.8 million low-wage jobs, and 1.9 million middle-wage jobs. The growth of good jobs accelerated from 2011 through 2012 and continued adding more jobs through 2014. The research found that 86 percent of the good jobs are full time, 68 percent offer health insurance, and 61 percent include retirement benefits.

The research reinforces the value of a college education—2.8 million out of the 2.9 million good jobs were filled by college graduates. Fewer workers holding a high school diploma held good jobs by the end of 2014 than did in 2010. "Throughout, what we see is workers with a high school diploma or less are getting pushed out," Jayasundera says. "If you don't have anything beyond a high school education you're going to be struggling really hard to get into today's labor market."

Nearly all of the good jobs as defined in this report require at least some college education, Jayasundera says. "But even when you come to the low-wage jobs, you needed some post-secondary education," she points out. "Sixty-one percent of the low-wage jobs were taken by workers with some college education or an associate degree."

And the research reaffirms that a college education in science, technology, engineering, and math (STEM) continues to be a wise choice: STEM fields added 881,000 new good jobs between 2010 and 2014, second only to the 1.78 million added in the managerial and professional occupations. And other recent research indicates that students who earn a bachelor's degree in STEM fields earn more over their lifetimes than those who hold other bachelor's degrees. (Read "New Study Shows STEM Education Pays off over A Lifetime" on Civil Engineering online.)

The center's research revealed that 445,000 good jobs were added in health care occupations, which rates second-highest after STEM fields, and 124,000 were added in sales and office support. But the blue-collar and education fields both lost good jobs over the same period.

"Job growth is being driven by the fastest-growing industries: consulting, business services, and healthcare," Jayasundera says. "Those are the industries that hire large numbers of managers and professional workers as well as STEM workers."

Jayasundera says that the overall sluggish recovery in the construction and manufacturing sectors is holding down the growth of middle-wage jobs, but both are beginning to show improvement.

She says that the center will undertake research to learn more about the college graduates who have filled these good jobs during the recovery and also to research wage stagnation during the recovery to determine how severe it is and why it is happening. "The stories that we hear is that wages have not been growing," Jayasundera says. "There is employment growth happening, but the wages have been stagnant."

"There are small signs of improvement, but it is not anywhere near what we want to see," she says. "I want to look into that wage growth a little bit more."
From T-Squares to Tiaras

My foray into the world of beauty queens

By Sarah Dinwoodie, Manchester

This past Halloween, I traded in my steel-toes for stilettos – but not for trick or treat. Instead, I competed for Miss New Hampshire USA 2016. This being my first pageant, I had no idea what to expect. The pageant weekend was grueling, starting with about 9 hours of rehearsals, a preliminary competition, the interview, and culminating with the final competition and awards Sunday evening. Through the hours spent practicing walking on stage, posing, and trying to learn the opening routine (all while in 4-5 inch heels!), I was incredibly nervous but felt more confident with every step I took.

At this point, many of you are probably wondering why a young engineer with a Master’s degree in Environmental Engineering would want to participate in a beauty pageant. While these pageants typically get branded as superficial and too focused on physical beauty, they also attract an audience of young girls and women who look up to the contestants. I was motivated to participate in the pageant because I think I can be a great role model for girls of all ages. I want to inspire them, challenge them, and be an advocate for those who cannot advocate for themselves.

During the interview portion of the competition, I was able to talk about my experience as a woman working in the engineering field and how much I enjoy my career at Golder. Throughout the competition I also had the opportunity to talk with the other contestants about their career aspirations and about my experience as an engineer. It was really satisfying to talk about what I find so interesting about my career and to see that I was inspiring some of the girls to consider the engineering field as a potential career path.

So what did I get out of my pageant experience besides a spray tan, blistered feet, and way too much knowledge about make-up application? I left pageant weekend extremely impressed with the women who compete in these contests and with a whole lot more confidence in myself. I am an outgoing person, but have a terrible case of stage fright. Even I found being on the stage to be empowering. I felt beautiful, confident, and proud of myself even though I didn’t win the top title. I was, however, lucky enough to be awarded the title of Miss Congeniality NH 2016. Now that the pageant is over (and my feet have been iced), I can say I am glad to be back in my chair, doing the awesome work we do as engineers.
P.E. REFRESHER COURSE FOR CIVIL ENGINEERS
SPONSORED BY THE ENGINEERING EDUCATION COMMITTEE

TENTATIVE DATES

STARTING January 12, 2016
LOCATION: NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION – CONCORD

The P.E. refresher course will be offered on Tuesday evenings from 6:00 p.m. to 8:00 p.m., beginning January 12, 2016 (tentative) and will run for 12 weeks. The course will focus mainly on problem solving and discussion in the following areas:

- Transportation
- Hydraulics
- Soil Mechanics
- Construction Engineering
- Traffic
- Sanitary
- Structural Design

The course will finish prior to the P.E. exam, providing additional time for individual review and preparation. The upcoming exam is scheduled for April 15, 2016. Visit the Joint Board of Licensure’s website for exam information and applications: http://www.state.nh.us/jtboard/home.htm

The course book is the latest edition of the Civil Engineering Reference Manual from Professional Publications (14th Edition). NHASCE has setup an account with Professional Publications so the students can purchase their course books directly and get approximately 15% off at the following website.

http://www.pplpartner.com/SX876

A complete schedule of all lectures and instructors will be available at the first session. Please submit your applications by January 5, 2016.

For further information, contact Michael Mozer, P.E. at (603) 391-0854, or Michael.mozер@hdrinc.com

* REGISTRATION FORM * P.E. REFRESHER COURSE *
* April 2016 Exam *

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Course Fee:  
- ASCE Members - $150.00 (Course Book Not Included)
- Non-Member - $300.00 (Course Book Not included)

Make checks payable to: New Hampshire Section, ASCE

Send registration form with fee to: Michael Mozer, P.E.
HDR
250 Commercial Street, Suite 3007
Manchester, NH 03101

*Your ASCE membership no. can be found on the address label on your issues of ASCE News or Civil Engineering magazine.
65th Annual Engineers Week
Awards Banquet & Exhibition

Thursday, February 25, 2016
SERESC Conference Center
29 Commerce Drive
Bedford, New Hampshire

PRELIMINARY AGENDA

Educational Sessions – to be determined
2:00-3:00 pm
3:00-4:00 pm
4:00-5:00 pm

Exhibition & Awards Banquet
2:00 to 4:30 pm Exhibit set-up
5:00 to 6:30 pm Exhibits open
5:00 to 6:15 pm Social hour
   (Cash bar & Hors d’Oeuvres)
6:15 to 7:45 pm Dinner
6:15 to 7:00 pm Presentation of Awards
7:45 to 8:30 pm Keynote Speaker

SAVE THE DATE!!!
February 25, 2016
Registrations will open in January

National Engineers Week (E-Week) is celebrated around the country every year in February to commemorate the birth of engineering, beginning with the first US engineer and President, George Washington. This year our Annual Awards Banquet will be once again held at the SERESC Conference Center - 29 Commerce Drive in Bedford, NH.

In celebrating 65 years of National Engineers Week, there will be an afternoon of educational sessions with special guest speakers for 3 Professional Development Hours (PDHs) for our NH Engineering Professionals.

In addition, this year we are pleased to have as our keynote speaker, Mr. Andrew Card, President of Franklin Pierce University. Among his numerous achievements in federal service, many of you may recognize that President Card was the Chief of Staff to President George W. Bush from 2000 through 2008 and lived through 9-11 firsthand. After his distinguished political career, Mr. Card served as dean of the Bush School of Government and Public Service at Texas A&M University before being named the 5th President of Franklin Pierce University. What many of you may not know about Mr. Card, is his educational background as an engineer. We invite you hear his story.

You can learn more about Pres. Card at the following link: http://www.franklinpierce.edu/about/president/

If you have questions about the event or wish to sponsor and/or participate in the Trade Show, please contact Larry Dwyer, P.E. 603-206-1115 or by email at Ljdwyer@terracon.com.

For More information on National Engineers Week and the National Engineers Week Foundation, visit http://www.eweek.org/Home.aspx.
Did you know?

You can view this and past issues of "The New Hampshire Civil Engineer" on our website. Visit us at www.ascenh.org and click on the current newsletter or "Past Newsletters".

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ASCE NH
PO Box 4953
Manchester, NH 03108-4953
Cranium Challenge

January 2016

Answer to December Puzzle:

The day they said it was Thursday. (“Yesterday” was Wednesday)

Everyone that responded got it correct. They included:

Darren Benoit, P.E., McFarland Johnson
Jeffrey Benway
Paul Lefebvre, Michie Corp.
Matthew O’Brien, P.E., Hoyle, Tanner & Associates
Jim Rope, P.E., Tetra Tech, Inc.

January puzzle:

What color was your hat and how did you know?

Send your guesses to Thomas Selling via e-mail: Thomas R. Selling thomas.selling@prodigy.net

Correct answers received by December 31st and names of correct guessers will be published in a future edition of “The New Hampshire Civil Engineer.”
In late 2012 we introduced a new corporate sponsorship opportunity – Corporate Sponsor of the Month! What is a Corporate Sponsor of the Month? This could be YOUR company! For the rate of $250.00, we offer a 8” x .5” Front Page Banner Advertisement featuring your company logo, linked to your firm’s homepage. The ASCENH homepage shows each monthly sponsor’s logo, again linked to that firm’s homepage. In addition, a full page of our newsletter is yours -- available for you to tell our readers anything you want about your company – maybe you’ve recently acquired some new talent you want to boast about; or perhaps you just completed a very special project. Any topic that would be of interest to your colleagues in the engineering industry – You may use the space for photos, narrative, graphics - whatever way you decide to put your company’s name – literally – in the headlines!

Many of you took advantage of this new opportunity and we thank you! Without your sponsorships, we would have been unable to award as many Scholarships to high school and college students studying engineering. After all, that is the reason for all of the ASCENH’s fundraising activities – to provide as many scholarships each year as we are able!

If you’ve never taken advantage of this unique opportunity, or if it’s been a while, please consider contacting me for more information and to reserve your spot!

Contact: jay.hodkinson@gza.com

Visit our website to view previous issues of our newsletter: www.ascenh.org

Thank you for your consideration!
Thank you to our past Sponsors of the Month for showing support for the ASCE’s New Hampshire Section! Please consider signing up for sponsorship of future editions of The New Hampshire Civil Engineer. Remember, all proceeds go directly to the Scholarship Fund!!

Now reserving space for 2016!

To reserve space or learn more, contact jay.hodkinson@gza.com

Of course, our regular classified advertising section is still available. See page 2 for more information.
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LAST CHANCE!
See page 13 for new options regarding delivery of your copy of *The New Hampshire Civil Engineer*

<table>
<thead>
<tr>
<th>Planning Calendar</th>
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<tr>
<td>January 6, 2016</td>
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<tr>
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Visit the ASCE-NH Website (www.ascenh.org) for up to date details for upcoming meetings and events.

View the unified engineering calendar at www.nhecal.org.
Contact Jay Hodkinson (jay.hodkinson@gza.com) for details on upcoming meetings.