

## The 2012 Construction Industry's Economic Outlook

Presented by Ken Simonson, Chief Economist, Associated General Contractors of America

The construction industry and related services including engineering and architecture have been among the hardest-hit sectors in the worst economic downturn in over 70 years. Recent government economic stimulus spending has helped the construction industry, but additional Federal investment in infrastructure seems far from assured, and state and local governments are constrained by lower revenue and reluctance to take-on additional debt. Spending by the private sector including investment in new housing and commercial property is far below recent levels.

All evidence seems to point towards a gloomy 2012 and beyond; *or does it?*

Ken Simonson joined the Associated General Contractors of America as its Chief Economist in September 2001.



Since day-two, he has provided insight into the economy and what it implies for construction and related

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industries. His weekly newsletter, *The Data DIGest*, goes to more than 14,000 readers. He is interviewed and quoted almost daily by local and national media, including *The Wall Street Journal*, *USA Today*, and *CNBC*.

Ken has 35 years of experience analyzing, advocating, and communicating about economic and tax issues for associations, companies, and government agencies. He is also active in several professional and charitable organizations, and has just been elected Vice President of the 2,300-member National Association for Business Economics.

Please join us when Ken will provide his fearless forecast for the construction industry's near-term and long-term prospects. We will meet on **Tuesday, October 18, 2011**, at the **Hilton Arlington**, 950 North Stafford Street in Arlington, VA, on the second floor in the Gallery Ballrooms. This location is in the same block as



**Construction Industry Prospects in 2012: Full steam ahead or end of the tracks?**

the Ballston Station on Metro's Orange Line. Registration and networking will be from 6:00 to 6:45 p.m., followed by dinner. The program will start around 7:15 p.m. and close by 8:30 p.m. Please RSVP by October 13, 2011. The cost will be \$10 for students, \$35 for those pre-registering, and \$45 for walk-ins. One Professional Development Hour (PDH) will be awarded to attendees. Click [HERE](#) to register. For questions, please e-mail or call John Casana at [john.casana@gmail.com](mailto:john.casana@gmail.com). ■

## Coming Soon: U.S. Army Corps of Engineers to Discuss the 2011 Mississippi River Floods

Joint National Capital Section Meeting with the American Water Resources Association, National Capital Region on November 14, 2011

In the spring of 2011, heavy rains across the Southern and Midwestern U.S. resulted in the lower Mississippi River experiencing a 500-year flood. In a rare and controversial action, the U.S. Army Corps of Engineers (USACE) opened floodgates of the Morganza Spillway in an effort to protect Baton Rouge and New Orleans. Tens of thousands

of homes in Mississippi and Louisiana were ordered evacuated during this time. To discuss the 2011 Mississippi River floods, Ms. Karen Durham-Aguilera, P.E., SES, will present on the USACE's actions prior to and during this event. Ms. Durham-Aguilera currently serves as the Director of Contingency Operations and Office of Homeland

Security, Headquarters USACE. The joint NCS-AWRA meeting will be held at the Hilton Arlington in Ballston, VA. Note that this will be a **rare Monday night meeting**. ■



## President's Corner

The ASCE-National Capital Section (NCS) is off to a running start. The new officers were installed at our first Section meeting, and our keynote speaker, Duke University Professor Henry Petroski, delivered an informative and engaging talk titled "Success and Failure: A Paradoxical Relationship." I encourage all members to attend our monthly Section meetings to stay abreast of changing circumstances, emerging technologies, network with other members, and earn PDHs. I also suggest that our regular attendees invite a guest to experience these benefits, and expand the perspectives of our networking and conversations.



I am humbled to take the helm of an organization with such strong traditions and established programs. As an example, the boundary stones restoration project championed by Steven Powers will be featured on a PBS special on Friday, October 7, at 9:00 p.m. At our initial Board meeting,

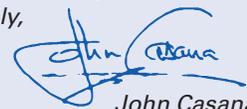
we set a strategic goal for the coming year to deepen and broaden the interconnections among our members, as well as with other like-minded professional associations, while maintaining and growing our established programs.

As examples, our November Section meeting will be a joint meeting with the American Water Research Association, and we are planning to

conduct an infrastructure report card incorporating the sustainable infrastructure rating system being developed in part by ASCE. Other initiatives may include a Habitat-for-Humanity project, and support for Student Chapter participation in our NCS/EPA P3 EXPO activities. The common thread in each initiative is an appeal to common interests of our various member groups.

We have many talented members. By integrating our talents, the sum will amount to a greater whole. Please contact me or any Section officer to get involved, express your ideas, and influence this change.

Sincerely,



John Casana, P.E.

## Enhance Your Leadership Skills with ASCE's Leader Education and Development (LEAD) Program

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LEAD is an eight-month, highly interactive course, comprised of seven training sessions and one individual coaching session. Earn up to 4.5 Continuing Education Units while gaining valuable insights from the faculty and your peers. The next offering of **LEAD** begins on **November 16, 2011**, at **ASCE Headquarters in Reston, VA.**

### Registration Deadline:

**October 28, 2011.** Click [HERE](#) for more information on the registration fee, deadlines, and application.

### Questions?

Contact Melissa Prelewicz at ASCE: 703-295-6341 or [mprelewicz@asce.org](mailto:mprelewicz@asce.org). Visit [www.asce.org/lead](http://www.asce.org/lead) for more information. ■

## Newsletter

**L.J. Sauter, Jr., Editor**  
Telephone: 202-502-8205

**November 2011 Issue Deadline:**  
**October 14, 2011**

**To Submit Articles:**  
[laurence.sauter@ferc.gov](mailto:laurence.sauter@ferc.gov)

**Address Changes:**  
Call 1-800-548-ASCE, email [member@asce.org](mailto:member@asce.org), go to <http://www.asce.org>, or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Remember to include your membership number.

## National Capital Section

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**Fady Afif, Past President**  
301-921-2862  
[afiff@bv.com](mailto:afiff@bv.com)

### Committee Chairs

Please refer to the NCS website at <http://www.asce-ncs.org> for a current list of NCS committees and chairs.

## 2011–2012 Student Chapter and Faculty Advisors Contacts in the NCS

So far this year, the NCS has four new Student Chapter presidents. Our monthly meetings, committee meetings, and other activities can provide a tremendous opportunity for student chapter members to network, learn about the engineering field from working professionals, and find out about job opportunities. Importantly, student chapter members and their faculty advisors are WELCOME to contact or join us at virtually all of our activities. We truly hope to see representatives of all the student chapters and their advisors on a routine basis. Please make them feel at home! ■

School	Faculty Advisor	ASCE Student Chapter President
<b>Catholic University of America</b>	Dr. George P. Mavroeidis <a href="mailto:MAVROEIDIS@cua.edu">MAVROEIDIS@cua.edu</a>	Nicholas Colameco <a href="mailto:57COLAMECO@cardinalmail.cua.edu">57COLAMECO@cardinalmail.cua.edu</a>
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<b>University of the District of Columbia</b>	Dr. Pradeep K. Behera <a href="mailto:pbehera@udc.edu">pbehera@udc.edu</a>	Richard Barrett <a href="mailto:richard.barrett@udc.edu">richard.barrett@udc.edu</a>

## Volunteer Activities for the NCS 2011–2012 Season

For the past decade, thousands of young people in the Maryland-Virginia-Washington, DC area had their first class in Engineering 101, *Introduction to Engineering*, taught by a NCS member at a NCS activity on the National Mall or at the National Building Museum (NBM).

Some of these young people are practicing engineers today or enrolled in engineering school, in part at least,

because a NCS member took the time to spend a few hours on a Saturday leading fun activities like building chairs out of newspapers or building truss bridges out of toothpicks.

In the 2011–2012 season, NCS will be sponsoring activities including Discover Family Engineering Day on February 18th at the NBM in Washington, DC.

Other volunteer activities such as Girl Scout Day and Cub Scout Day will

be conducted in January and April, respectively. Watch for announcements in your monthly NCS newsletter. Volunteer activities are also advertised by e-mail through Cvent. There is no easier or more fulfilling way to give back to the profession, or to help ensure that our nation has a robust corps of civil engineers to meet the challenges of the future. ■



A NCS volunteer explains the science of water filtration to a Cub Scout.



A junior skyscraper designer makes observations during wind tunnel testing.



Girl Scouts test experimental water filters.

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# ASCE NCS Awards Banquet

## Award Nominations Now Being Accepted

The Annual Awards Banquet gives us the opportunity to recognize and celebrate local excellence in projects, engineers, and students who have contributed to our society and our community. Every year, the NCS presents a number of awards during its annual banquet. Recognized parties include our meritorious service award winners, outstanding civil engineering project, student scholarship award winners, and members of the NCS who have achieved Life Member status.

The Section award candidates are nominated by the Awards and Nominations Committee which actively seeks recommendations from NCS committees and members. All members are encouraged to submit, either by e-mail or traditional mail, the names of the members and/or projects for nomination for one of these awards. The awards are granted by the NCS Board of Directors and are given at the Section's Annual Awards Banquet held in the spring. These awards include the Community Service Award, the Outstanding Civil Engineering Project Award, and the Meritorious Service Award.

### Community Service Award

The Community Service Award recognizes outstanding contributions by an individual toward community improvement in the Washington metropolitan area. The nomination can be submitted directly by the individual or by another member on his/her behalf. The nomination shall briefly describe the achievements and contributions of time and talent toward a civil engineering-related activity that has furthered the welfare of the community within a three-year

period preceding the award. The Awards Committee reviews and selects the winner for this year's award. The awardee will be notified and invited as an honored guest to attend the banquet and to receive the award – an engraved plaque, naming the individual and accomplishment.

### Outstanding Civil Engineering Project

This award recognizes a local civil engineering project and is given when an engineering project in the National Capital area is deemed to demonstrate the greatest civil engineering skills and represents the greatest contribution to civil engineering progress. The project must have been substantially completed within the preceding three years. In granting the award, the Awards Committee considers the contribution to the well-being of individuals, the resourcefulness in planning, the solution of design problems, the pioneering use of materials and methods, innovations in construction, impact on the physical environment, unusual aspects, and aesthetic values. The possible adverse effects of the project are taken into account as well

as the beneficial aspects. The award is made for uniqueness, contribution to the regional quality of life, and to recognize technical achievement. An award plaque is given, naming the project and the firms and/or agencies involved. The awardees are notified and invited to attend the banquet as guests to receive the award.

### Meritorious Service Award

This award recognizes an individual member of the NCS who has made outstanding contributions to the work of the Section. The awardee must be an active member who has contributed significant time and talent to the Section and who sets a high standard of professionalism through service.

Please submit all nominations to Mark Leeman no later than **January 6, 2012**. ■

Mark Leeman, P.E.  
Chair, Awards and Nomination Committee  
Facility Engineering Associates  
12701 Fair Lakes Circle, Suite 101  
Fairfax, VA 22033-4910  
[mark.leeman@feapc.com](mailto:mark.leeman@feapc.com)

## Employment Clearinghouse

*The ASCE-NCS provides the Employment Clearinghouse as a free service to its membership. The Clearinghouse allows members to post short notices for available positions or candidates seeking employment. All employers listed herein are equal opportunity employers. If*

*you have questions or would like to post a position, please contact the Employment Conditions Committee, National Capital Section ASCE, 8502 Buckhannon Drive, Rockville, MD 20854-3503; phone: 301-983-9777; fax: 301-983-1953; or e-mail [sassi22@verizon.net](mailto:sassi22@verizon.net).*

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Engineered Problem Solving

# ASCE's National Historic Civil Engineering Landmarks

## The Patowmack Canal & Locks, Great Falls, VA

(Geographic Coordinates: Latitude N 38° 59.424, Longitude W 077° 14.970)

By the middle of the eighteenth century, settlement along the Potomac River west of the Allegheny Mountains was well under way. In 1749, the Ohio Company was established to develop the growing valley and capitalize on the untapped fur trade with the Indians by utilizing the Potomac as a route to the west.



ASCE National Historic Civil Engineering Landmark Plaque placed in 1969.

One of the first to become interested in a navigable Potomac waterway was George Washington. In his teens, he aided in surveying the holdings of Lord William Fairfax along the upper Potomac. As early as 1754, on his



ASCE Plaque is set in rock directly behind Lock No. 1.

return from his defeat at Fort Necessity, Washington made a report proposing a project by which the Potomac River might be made navigable from tidewater to a point west of Cumberland, MD, and then connect by trans-mountain roads with streams leading to the Ohio River.

The Patowmack Company was formally organized at a meeting of the stockholders on May 17, 1785. Washington was elected its first president, and James Rumsey, the early experimenter with the steamboat, engaged as the chief engineer. The proposed project was to have a series of short by-pass canals to skirt the falls which occurred at several locations along the course of the river. There were to be five altogether at House's Falls, Harper's Ferry, Seneca Falls, Great Falls, and Little Falls.

The four locks at Little Falls, constructed in 1795, were the first to be completed. Work began on the locks at Great Falls and was not finished until 1802. The system at Great Falls consisted of five locks, each 100 feet in length and walled



View of Lock No. 1 at upper plateau of canal.



View looking up from Mather Gorge showing the sheer rock walls that were blasted and dug out to construct the lift locks from the river to the upper plateau.

with large blocks of hand-hewn sandstone. It was necessary to blast and cut a deep cleft through the solid rock cliff of the Potomac River's Mather Gorge, rising 77 feet from the river level below to the river level above the Falls. The rock blasting was one of the first uses of black powder. The passage through the rock wall had to be large enough to accommodate loaded bateaus (flat bottom boats): a channel at least twelve feet across. The typical bateau was anywhere between 50 to 75 feet long and 5 feet in width, and carried up to 20 tons of cargo. The total lift was 77 feet distributed through the locks with the greatest lift in any one lock of 19 feet.

The [Patowmack Canal and Locks](#) was a first step for American canal building and it played a significant role in the development of canal engineering in this country. It was designated a "National Historic Civil Engineering Landmark" by the ASCE in 1969. ■

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# Be a Part of History!

## Join the NCS and Other Volunteers in the October 2011 Boundary Stone Fence Restoration Event

On October 22, the NCS will once again spearhead the repair and restoration of three more fences which surround the original boundary stones which designate the Federal City of Washington, DC. Currently, 28 of the original fences installed by the Daughters of the American Revolution in the early 1900's remain, six replacement fences have been installed, and six of the stones/sites have no fence at all. To date, the NCS has restored a total of 7 fences (one at the kick-off in May 2010, three in October 2010, and three in May 2011).

The NCS' Stephen Powers, P.E., is the driving force behind this project and directs the work of each team. Stephen's

untiring advocacy of the boundary stones has earned him wide recognition, the latest of which includes an interview and participation in a local documentary *More Unusual Attractions – the WETA Guide*. This documentary, which will air on October 7 at 9 p.m. on WETA TV 26, explores 18 local hidden wonders in the Maryland-Virginia-DC area including the Boundary Stones of the District of Columbia.

Come and spend a morning cleaning the grounds around the stones, scraping years of old paint from the fences, and priming and painting the fences. While strenuous, the work is rewarding, and... you'll become a part of history!



East Cornerstone, May 2010

For further information or to sign-up to help, contact Stephen Powers at [stephen@designpowers.com](mailto:stephen@designpowers.com) or at 703-906-8542. Information on this long-term project is also posted on the NCS website (click [HERE](#) to view). ■



SE #1, Oct 2010



SE #3, Oct 2010



SE #5, Oct 2010



SW #7, June 2011



NW #3, June 2011



NW #2, June 2011

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## PROJECT MANAGEMENT

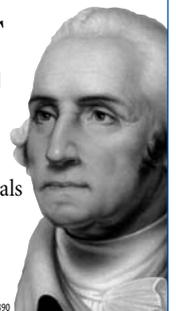
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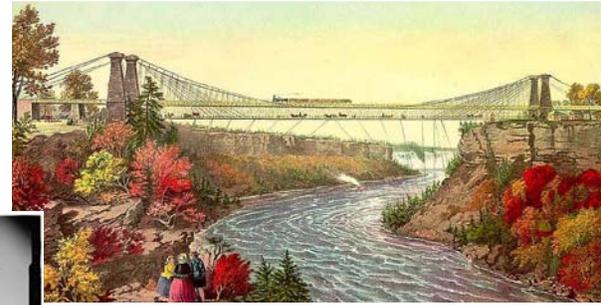
# September Meeting Recap

## Henry Petroski Presents the Paradox of Success and Failure

Duke University professor Henry Petroski did not fail to impress in his presentation to the NCS and other guests at its kick-off meeting in September. Petroski explored ideas from one of his many popular books on the topic of engineering and failures. His treatment of the topic brought a bit of a philosophical outlook. Most engineers are trained to avoid failure (with good reason) and strive for success. Petroski's main point was that giving thought to both success and failure is an important part of improving the state of practice in any discipline.

Professor Petroski focused his remarks to the discipline of bridge building, but was clear to mention that the principles of diagnosing successes and failures can, and should, be applied

the 19th and 20th centuries, marking the advances and setbacks of bridge construction.



Above: Roebling's Niagara Gorge Bridge. Note extensive use of stays and a truss sufficient to avoid significant deflection beneath the locomotive.



Left: Roebling's Brooklyn Bridge.

Below left: The Tacoma Narrows Bridge at failure, November 1940. Narrow (two lanes) and light, no trusses, no stays.



Below: The Benjamin Franklin Bridge, 1926.



One of Petroski's points was that many of the fundamental principles of success for suspension bridge design were noted in the mid-1800s by John Roebling (1806–1869), perhaps best known as the designer of the Brooklyn Bridge. Roebling's knowledge was gained in an important way: by studying failures – what went wrong with physical systems and how these related to fundamental principles. Roebling noted in 1855 that wind was the enemy of bridges, and that the key to successful suspension bridge design was "weight, girders, trusses, and stays." As advances in construction took place, engineers forgot some of the lessons first articulated by Roebling and began to build lighter, more slender bridges, stabilized with fewer stays. Petroski's advice to

the modern-day engineers in the audience was not to neglect work done in times past simply because it is aged. The fundamentals of suspension bridge construction cited by Roebling remained just as valid 100 years after he published them, as highlighted by the Tacoma Narrows Bridge which opened just four months prior to its failure in 1940.

Petroski brought the presentation to a conclusion by summarizing his studies *continued on page 9*



Henry Petroski discusses another famous engineering failure.

to any field. As a master story teller, he brought the audience through the development of longer and lighter suspension bridges. He traced the history and development of suspension bridge design and construction through



Incoming NCS President John Casana accepts the gavel from outgoing President Mark Leeman.



Packed house: The Hilton Arlington.

## How Companies Are Saving Money by Deploying Office Networks in the Cloud

### Two Case Studies

"The Computer Corner," a monthly column by Ranjit S. Sahai, P.E., F.ASCE

I found these case studies fascinating in their scope and impact on how businesses are changing they're implementation of technology to save money. The first is from a Microsoft case study on Target stores, a national retail chain that is saving BIG by moving its servers to an on-premise cloud. Target has traditionally deployed seven servers at each of its stores to track inventory, run cashier terminals, and support other workflows. With over a thousand stores spread across the nation, that is a lot of servers! The company experimented with a two-server private cloud appliance and discovered that this new appliance could easily run its seven application and database servers. Furthermore, the implementation offered significant cost savings through reduction in hardware, energy, and labor costs.

The second is from a Channel Cloud case study on a fast-growing professional services firm that saved BIG by moving its entire office network to a data center-hosted public cloud platform. The firm had five servers that were reaching end-of-life and approximately forty computers. They moved their office network consisting of the servers and computers to a public cloud while leaving printers, scanners, and thin clients at the office. They eliminated a large capital expenditure by ditching on-premise servers and computers and lowered their monthly costs for technology when all hardware, energy, and labor costs were factored in.

### On-Premise Private Cloud and Hosted Public Cloud

In the first case study, Target has an IT division to manage technology and support its stores from a central location. The company invested in a private cloud appliance that greatly reduced the time it takes to initialize and configure the technology needed to power a store. Target also benefited from the server failover and business continuity features built into the appliance. Here is how Target saved money:

- reduced hardware and energy costs for the 2-server private cloud appliance that handles a 7-server workload;
- significantly reduced the time needed to initialize and setup the 7-server workload when setting up stores, thus saving on expensive labor costs; and
- reduced average downtime companywide due to failover and business continuity built into private cloud platforms.

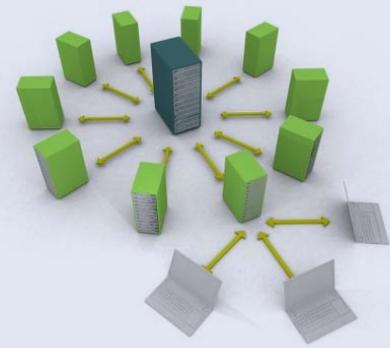
For a successful private cloud deployment, you need to ensure power redundancy at your office and access to private cloud appliance support.

The second case study is an example of a hosted public cloud. The professional services firm was able to retire its old servers without buying new ones, thus preserving cash. Also, it no longer needed expensive on-premise technology management because helpdesk staff could handle, with support from its technology provider, even the most challenging of issues. Here is how the professional services firm saved money:

- eliminated capital costs associated with new server acquisition by deploying virtual servers in a public cloud;
- eliminated overhead labor associated with dedicated technology management by having generalist help-desk role take care of technology support needs; and
- virtually eliminated loss of production associated with server downtime due to 99.9 percent server uptime guarantee provided by a professionally run data center.

*Standardized business processes lend themselves well to taking advantage of cloud infrastructure.*

Much like the electric power plant made electricity into a commodity that anyone could consume, the delivery over the Internet of data processing power and storage from massive data



Your server and computers can be deployed as cloud resources that you access using a smartphone, tablet, PC, or Mac

centers is creating a fundamental shift in how businesses acquire and use technology. In the two case studies, the businesses reduced capital outlays toward hardware and took advantage of automated system deployments and pooled support resources. We are slowly but surely moving toward the time when many office networks will reside in data centers.

### Conclusion

Implementations of complete office networks in the cloud are not commonplace yet, but it is important you be aware of the trend and be ready to take advantage of such an implementation when the time is right. These implementations deliver savings by allowing you to leverage the power of a massive computing infrastructure and support process while paying only what you use. The more technology-dependent your business and the more standardized your business processes, the quicker you are likely to find yourself ready to jump on-board this technology as a service platform.

### About the Author

Ranjit Sahai of RAM Consulting Corporation has been writing on computer topics since 1987 and has authored five books. He is the Chair of the ASCE-NCS Automation Committee. He welcomes comments and feedback via email. Visit the **Contact Us > Committee Chairs** page at [www.asce-ncs.org](http://www.asce-ncs.org) or the **Contact Us** page at [www.rcare-solutions.com](http://www.rcare-solutions.com) to send a message to him.

## September Meeting Recap

continued from page 7

of engineering history and failures. Most failures occur when the limits of experience are tested. When operating within the limits of experience, which is typical for most designs, sophisticated models are not needed to achieve success...or

avoid failure. On the other hand, when outside the limits of experience, a deeper understanding of the fundamentals is needed. This is where studying and understanding past failures can help engineers achieve success.

The September meeting also provided a format for the new NCS President and Board of Directors to be introduced to the membership. We were fortunate to have Dr. Robert Efimba, P.E., on hand to conduct the induction. ■



David Hathcox



David Hathcox

Far left: The NCS Board of Directors for 2011–12 (from left): Fady Afif, Mark Leeman, Adam Stewart, John Casana, Stephen Powers, David Dajc, Sara Guerrero, Rollie Berry, and L.J. Sauter. Not pictured: Qamar Kazmi and Christian Manalo.

Left: Dr. Efimba conducts the induction of the new NCS officers.

Photos of the NCS meeting were taken by David Hathcox, courtesy of ASCE.

## Section's Scholarship Trust – Your Section Voluntary Contribution

Many of you know that our Section's Scholarship Trust annually awards scholarships to high-academic civil engineering students at the five universities in our Section boundary: Howard University, Catholic University, the George Washington University, University of District of Columbia, and

George Mason University. We need your help with this effort, and it's easy!

You will be receiving your annual ASCE membership dues request soon. On the form, the block for Section Voluntary Contribution allows you to contribute directly to our NCS Scholarship Trust. Your contribution will

have a direct impact on the future of the Civil Engineering profession. Please be generous in your contribution – no contribution is considered too small.

Other sources of funding for our Trust include: the Past Presidents Annual Contributions, Memorial Contributions, and Corporate Contributions. ■

## Upcoming Events (Also available on the NCS website under the Events tab)

### October 6

AWRA meeting, Hydrophilanthropy: Sustaining Life and Economies of the Developing World, at the NAPA Building, 900 7th Street NW, Suite 600, Washington, DC at 6:30 p.m. (registration begins at 5:30 p.m.). Register online at <http://state.awra.org/natcap/> or contact Sarah Freeman at [sarah.stgeorgefreeman@gmail.com](mailto:sarah.stgeorgefreeman@gmail.com).

### October 7

See the NCS' own Stephen Powers, P.E., in the Public Broadcasting Service's presentation of "Washington's Unusual Places" as it covers the Boundary Stones of the District of Columbia. The show will air on WETA TV channel 26 at 9 p.m., and be repeated at 9 p.m. on October 10.

### October 12

NCS Structural Engineering Committee will begin the season with a seminar by Simpson StrongTie on post-installed

anchors according to ACI 318-11, appendix D, at the offices of AECOM in Arlington, VA at 6 p.m. For further information, contact Timothy Park at [timothy.park@aecom.com](mailto:timothy.park@aecom.com).

### October 18

NCS monthly meeting at the Hilton Arlington: Ken Simonson, Chief Economist for the Associated General Contractors of America, will discuss his thoughts on what 2012 may bring for the construction industry. (See newsletter article.)

### October 22

NCS boundary stone fence repair/restoration event. Come and be a part of history! For more information or to volunteer, contact Stephen Powers at 703-906-8542 or [stephen@design-powers.com](mailto:stephen@design-powers.com). (See newsletter article.)

### November 3–5

Emerging Leaders Alliance Capstone

Workshop, to be held at the Westin Tyson's Corner in Falls Church, VA. Additional information is available at [www.emergingleadersalliance.org](http://www.emergingleadersalliance.org).

### November 15

NCS monthly meeting at the Hilton Arlington: Managing the Mississippi River Flood of 2011, to be presented by Ms. Karen Durham-Aguilera, P.E., of the U.S. Army Corps of Engineers. This will be a joint meeting with the American Water Resource Association. **NOTE: This will be a rare Monday meeting.** (See newsletter brief.)

### November 16

The next offering of the ASCE's acclaimed LEAD training, to be held in Reston, VA. Visit [www.asce.org/lead](http://www.asce.org/lead) to learn more and to register. For questions or further information, contact Melissa Prelewicz at 703-295-6341 or [mprelewicz@asce.org](mailto:mprelewicz@asce.org).