

# ASCE NEWS

NOVEMBER-DECEMBER 2016 • VOL. 1, NO. 1 • NEWS.ASCE.ORG

Diverse teams

## EXCITEMENT BUILDS FOR *DREAM BIG* MOVIE

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# INNOVATION INSPIRATION

Diversity and the drive to cut life-cycle costs give ASCE Convention attendees fresh ideas

DEBUT ISSUE

## Resilient ASCE Members Step Up and Help in Flood Crises

The 2016 summer brought historic and destructive rainfall to parts of the United States, including devastated communities in Louisiana and West Virginia. ASCE members in both states took the lead to help in rebuilding.

A group of volunteers near Charleston, WV, organized two flood relief days, clearing mud and debris and assessing various sites for potential salvage work.

In Louisiana, the ASCE Baton Rouge and New Orleans Branches worked together to help affected properties, removing soggy carpet and moldy sheetrock.



Courtesy Jeff Huffman  
West Virginia Section members lead volunteers in flood recovery.

“It’s a difficult thing. You almost feel guilty,” said member Joey Coco of Baton Rouge, a leader in the Louisiana recovery. “As an engineer, you kind of wrestle with

that dilemma of ‘What is the best use of my time?’ I realize that I made an impact, but I still choke up about whether I did enough.”

## Second Innovation Contest Seeks the ‘Next Big Thing’



Winners of the first contest visited Walt Disney Imagineering.

ASCE’s second annual Innovation Contest is now underway, welcoming civil engineering ideas with the potential to transform infrastructure and help meet the ASCE Grand Challenge, which aims to reduce life-cycle costs by 2025.

The inaugural contest attracted entries from around the world. Winners get to pitch their ideas to industry leaders. In the first year, that included KCI Technologies, Pennoni, Mott MacDonald, and Walt Disney Imagineering.

This year’s contest adds a new category – Next-Generation Transportation – and puts a special emphasis on proposals that would help remove lead from drinking water.

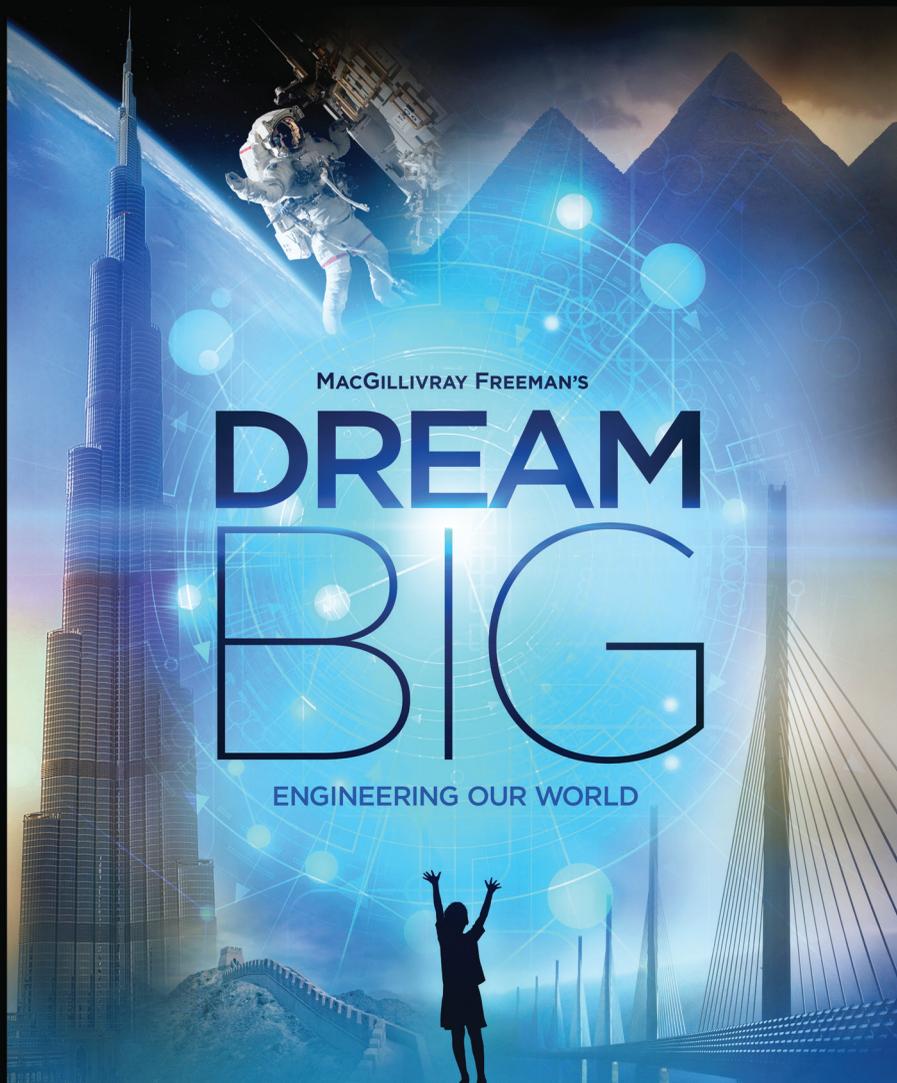
**MORE ON HOW TO SUBMIT A PROPOSAL:** [ascegrandchallenge.com/innovation-contest](http://ascegrandchallenge.com/innovation-contest)

## MOVER & SHAKER

“We’ve dedicated our careers to protecting the public’s health, safety, and welfare, and advancing society with the things we do. Whether you’re working in the private sector or the public sector, ultimately, you’re working for the people who make up this country and the planet.”



– Roger Millar Jr., P.E., F.ASCE  
Secretary of Transportation  
Washington State DOT  
Appointed by Gov. Jay Inslee, July 2016



A HEARTFELT STORY OF HUMAN INGENUITY

A MACGILLIVRAY FREEMAN FILM "DREAM BIG" PRODUCED IN PARTNERSHIP WITH AMERICAN SOCIETY OF CIVIL ENGINEERS PRESENTED BY BECHTEL CORPORATION  
 EDITED BY STEPHEN JUDSON AND JASON PAUL PRODUCED BY SHAUN MACGILLIVRAY DIRECTED BY GREG MACGILLIVRAY



DreamBigFilm.com

## The 'BIG' Reveal

The poster to be displayed in two months at IMAX theaters for the movie *Dream Big: Engineering Our World* was unveiled at the ASCE 2016 Convention. Production is on schedule for a worldwide premiere during Engineers Week 2017. Presented by Bechtel and produced by MacGillivray Freeman Films in partnership with ASCE, the awe-inspiring movie will awaken viewers to the contributions engineers make to civilization and excite youth about engineering careers.

STAY INFORMED ABOUT THE FILM,  
 OR JOIN THE *DREAM BIG* OUTREACH TEAM:  
[asce.org/dream-big](http://asce.org/dream-big)

## WHAT'S ONLINE



### TRENDING TWEET



ASCE Orange County @ASCEoc · Sep 29  
 #ASCEOC at the ASCE National Convention in Portland with Frans Johansson, the opening keynote speaker. Having a blast at #ASCE2016



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 @ASCETweets



LEARN five keys to integrative project delivery.  
[news.asce.org/five-keys-to-integrative-project-delivery](http://news.asce.org/five-keys-to-integrative-project-delivery)



WATCH and get to know ASCE 2017 President Norma Jean Mattei.  
[news.asce.org/meet-asces-new-president-2](http://news.asce.org/meet-asces-new-president-2)



SURF for answers to ethical dilemmas at ASCE's new ethics page.  
[asce.org/ethics](http://asce.org/ethics)



READ five reasons why you should get a P.E. license.  
[news.asce.org/ask-anthony-why-is-it-so-important-to-get-your-p-e](http://news.asce.org/ask-anthony-why-is-it-so-important-to-get-your-p-e)

# AT THE INTERSECTION OF IDEAS AND INNOVATION

CIVIL ENGINEERING AND FASHION MODELS?  
BELIEVE IT OR NOT, THERE IS A CONNECTION THERE.

Author and entrepreneur Frans Johansson, the ASCE 2016 Convention opening keynote speaker, challenged attendees during his talk at the opening plenary to combine seemingly disparate concepts and perspectives – including, yes, civil engineering and the world of high fashion, for example – to generate fresh approaches and new ideas.

His talk sparked a week of innovative thinking at the ASCE 2016 Convention in Portland, OR.

“Something happens when you introduce an unexpected, diverse element into a conversation – something remarkable. It awakens us. It encourages us to look at things in new and different ways.” — *Frans Johansson*

“Something happens when you introduce an unexpected, diverse element into a conversation – something remarkable,” Johansson told attendees.

The convention’s array of sessions addressed the forthcoming *ASCE 7-16* standard update, resilient design, leadership strategies, and other current industry topics.





Photos by Jim Tkatch for ASCE

A Hollywood-style opening reception led to a screening of an early cut of *Dream Big: Engineering Our World*, exciting viewers for the completed ASCE IMAX film to premiere in February 2017. Portland, OR, proved a great setting for a convention that also focused on sustainability, with technical tours of Willamette River bridges and the Bonneville Dam.



**COMPLETE ASCE CONVENTION COVERAGE, INCLUDING VIDEO:**  
[news.asce.org/asce-2016-convention](http://news.asce.org/asce-2016-convention)



The 2016 class of Distinguished Members was honored.

## 'I'm in!' for ASCE Grand Challenge



Civil engineers around the world have begun taking a pledge to support the

ASCE Grand Challenge goal to cut infrastructure life-cycle costs in half by 2025.

At [ASCEGrandChallenge.com](http://ASCEGrandChallenge.com), professionals support the initiative by clicking an "I'm in!" button. Several ASCE 2016 Convention events allowed engineers to share their ideas and strategies for achieving the goal.

"With the Grand Challenge, ASCE has done a great job of saying, 'Yeah, it's scary, but we can do this'," said Sam Richmann, a Portland State University civil engineering student at the convention.

**Are you in? More on the Grand Challenge and the pledge:**  
[ASCEGrandChallenge.com](http://ASCEGrandChallenge.com)

## Mattei ascends to 2017 presidency



Norma Jean Mattei took the ASCE Convention stage and shared both her Louisiana drawl and a vision for the profession's future during her installation as 2017 President.

"This is really exciting. It's a dream come true," said Mattei, Ph.D., P.E., F.ASCE. "I'm really excited to be entrusted by our membership to lead the profession."

## Highlights from ASCE's Sections, Branches, Younger Member Groups, and Student Chapters

**FLORIDA** The **Florida Section** released its **2016 Report Card for Florida's Infrastructure** with an overall grade point average of C, a slight improvement over the 2012 edition. Members who compiled the grades across 11 categories gave bridges the highest grade of B; schools, stormwater, and coastal areas rated lowest at D or D+.

**NEW JERSEY** **New Jersey Section** engineers also issued a new state Report Card over the summer with sobering news for residents – an overall grade point average of D+, based on 13 categories of infrastructure. Members noted they were issuing their D and D+ grades for bridges, roads, and transit amid political gridlock over the state's insolvent transportation trust fund.

**CALIFORNIA** An innovative **ASCE Civil Engineering Club** at a San Jose high school, advised by member Amin Ghafooripour, developed a program that combines civil engineering concepts with active-control technology. Students successfully built a shake table using VEX and Lego Mindstorms robotic systems.

**ALABAMA** ASCE 2016 President Mark Woodson attended the **Alabama Section's** ASCE and American Public Works Association Joint Summer Meeting, where he presented the ASCE Student Civil Engineer of the Year Award to Yasmeen Arafeh and delivered the keynote address. While in Mobile, Woodson toured the 53-acre, \$600 million Airbus A320 manufacturing plant.

**MISSOURI** For a fourth straight year, the **St. Louis Section** has been recognized for taking ASCE's commitment to diversity and inclusion to the local level. The Section was among seven recipients of ASCE's 2016 Section and Branch Diversity Awards.

**COLORADO** Distinguished Member Priscilla Nelson, Ph.D., recently published "Faces of Innovation: Building Partnerships to Bring Ideas to Life," an article and video for the NTT Innovation Institute. Nelson is mining engineering department head and professor at the Colorado School of Mines.

**HAWAII** The **Asian Civil Engineering Coordinating Council** – a 13-member group of professional societies including ASCE – held its seventh Civil Engineering Conference in the Asian Region last month in Waikiki, Oahu, HI. Attendees shared their experiences in implementing sustainable infrastructure in their homelands. For the first time, ASCE played host to the event, which rotates among members.

**GLOBAL** ASCE's **India Section** helped stage the 2016 Kshitij conference, an annual techno-management symposium that attracted more than 60,000 students to the Indian Institute of Technology Kharagpur, in the eastern part of the country. Conference activities focused on engineering technology advancements.



Courtesy Kelly Doyle, Nevada Section Truckee Meadows Branch

**D.C.** ASCE's next generation of leaders gathered for the Younger Member Leadership Symposium in August at Society headquarters in Northern Virginia. One group took a side trip into Washington, DC, for a tour of the U.S. Capitol's architecture and saw two green infrastructure projects – Pennsylvania Avenue bike lanes and the Fort Reno Green Roof Reservoir.



CENTENNIAL  
CONGRATULATIONS



**2016 marks the  
100th anniversary of  
four Sections**

commemorating their founding with ASCE – Illinois, Michigan, National Capital, and Utah.

**Successful Section, Branch, Younger Member Group, and Student Chapter events and activities** can appear here and in the monthly Region reports in *ASCE News Weekly*. Submit them to [asce.org/localnews](http://asce.org/localnews).

## Awards

**2016 Innovation in Sustainable Engineering Award** given to the **City of Burbank (CA) Water and Power EcoCampus**, for use of cutting-edge technologies to rehabilitate its 40-year-old water plant.

**2016 ASCE Presidents' Award** given to **Anthony S. Bartolomeo**, P.E., F.ASCE, for developing the ASCE Grand Challenge, urging youth to pursue degrees in 21st-century skills, and for his passion for volunteerism.

**2016 Professional Practice Ethics and Leadership Award** given to **Kancheepuram N. "Guna" Gunalan**, Ph.D., P.E., D.GE, F.ASCE, for a career dedicated to ethics and service to the profession.

**2016 ASCE President's Medal** given to **Marc A. Edwards**, Ph.D., M.ASCE, Virginia Tech engineering professor, for fighting to protect public health and safety in the Flint, MI, water crisis; and **Roger M. Millar Jr.**, P.E., F.ASCE, for program development and delivery innovations, support for sustainability, and service on ASCE's Public Policy Committee.



### F.ASCE

John Coombe, P.E., S.E., John C. Crittenden, Ph.D., P.E., NAE, Ruey Long "Kelvin" Cheu, Ph.D., P.E., Craig Farkos, P.E., Robert Ray Holmes Jr., Ph.D., P.E., D.WRE, F.EWRI, Wendy Lopez, P.E., Mark S. Meyers, Ph.D., P.E., Ellen M. Rathje, Ph.D., P.E., Brian Uy, Ph.D., P.E.

## Obituaries



**Eugene Raymond "Ray" DesOrmeaux, P.E., F.ASCE**, a former Louisiana Section president and Region 5 governor, and active member of the Committee on Professional Conduct, has died at 76. DesOrmeaux was a New Orleans native who left his stamp on Lafayette with

projects from residential subdivisions and office parks to a shopping center and the 13,500-seat Cajundome.



**D. Allan Firmage, P.E., Dist.M.ASCE**, active in ASCE since 1940 and a Brigham Young University professor of civil engineering, has died at 98. During World War II, he conducted research on military bridges for the U.S. Army Corps of Engineers. Firmage developed Utah's first technical

committee on bridges. He served on ASCE's Board from 1979 to 1982 with a focus on establishing international contacts.



**Gary Gilbert, P.E., G.E., ENV SP, M.ASCE**, the immediate Past President of California's Orange County Branch, has died at 43. He joined ASCE in 1995 and stepped up immediately, becoming Cal State Long Beach Student Chapter President and Los Angeles Section Treasurer

before his election as Branch President. Gilbert also enjoyed volunteer work in Honduras for Engineers Without Borders USA.

**More on each honoree and other award-winners: [news.asce.org/people](http://news.asce.org/people)**

## NOVEMBER

**17-18**

Financial Management for the Professional Engineer

*ASCE seminar*



**17-18**

Flexible Pavement Design and Rehabilitation *ASCE seminar*

**29**

#GivingTuesday – Remember the ASCE Foundation



## DECEMBER

**8-9**

Managing the Design Process: Keeping on Schedule, Within Budget, and Selecting the Right Resources *ASCE seminar*

**14-16**

HEC-RAS Computer Workshop for Sediment Transport *ASCE seminar*

**16-17**

Leadership Development for the Engineer *ASCE seminar*

## JANUARY

**4-6**

International Perspective on Water Resources and the Environment Conference, Wuhan, China



**11-13**

Streambank Stabilization for Restoration and Flood Control Projects *ASCE seminar*



**24**

Significant Changes from ASCE 7-10 to ASCE 7-16 *ASCE seminar*



**For details, visit [asce.org/conferences\\_events](http://asce.org/conferences_events) [asce.org/seminars](http://asce.org/seminars)**

## ASCE NEWS

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Bridges  
Curtain walls  
Roadways  
Homes

# The Power to Build Structures



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