The recent earthquake and aftershock in Haiti underscores the critical importance that well-maintained infrastructure is for a functioning society. Unfortunately, Haiti, as one of the poorest countries in the world, has long suffered the effects of political corruption, lack of a functioning judicial system, and lack of the means of implement new technology. Like many Caribbean nations Haiti has no national building codes or land-use zoning guidelines. Any technical standards used for a given project are chosen and/or interpreted by the individual engineers responsible for their respective projects. This in and of itself is not necessarily a problem provided that a competent engineer is in-charge. The real problem is a lack of uniformity for any standards and worse, little or no means to enforce even locally accepted design and construction principles.

Even many of the paved roads are in very poor condition, making helicopter lifts a primary means of transportation for medical evacuations and delivering aid. Also keep in mind that unlike California, the Caribbean does not have a history of earthquakes that have been studied that contribute to our overall design and building practices. As with most earthquakes causing significant damage, the engineering and scientific community should take this opportunity to seek additional knowledge that an earthquake’s effects may yield for Caribbean nations.

Brian D. Wolfe, PE ASCE President, San Bernardino/Riverside Counties Branch of the LA Section of ASCE
Dennis Hart Mahan was born on April 2, 1802 in New York City and raised in Norfolk, Virginia. He entered the United States Military Academy at West Point, New York as a cadet in 1820 and would spend nearly his entire career there until his death in 1871. Prof. Mahan was a renowned educator of military and civil engine-
neering and the author of several widely-used engineering textbooks. He was one of the original fifty founding members of the National Academy of Sciences. After 41 years on the faculty at West Point, facing the prospect of forced retirement, and suffering from declining health and depression, Prof. Mahan took his own life on September 16, 1871 by jumping into the Hudson River from a steamboat en route from New York City to West Point.

D. H. Mahan’s fifty-one years at West Point—from student to professor—were marked by exceptional achievement. While still a cadet in his third year,

Mahan also served as an acting assistant professor of mathematics. In 1824 Mahan graduated first in his class of thirty-one. Upon graduation he remained at West Point for two years as an instructor. He then was sent to Europe to study civil and military engineering works, primarily in France. In 1830 he returned to West Point as an acting professor and in 1832 was promoted to professor of civil and military engineering.

While a professor at West Point, Mahan became an enormously influential figure in military and civil engineering education and practice in the 19th century United States. Mahan’s former students were instrumental in the construction of roads, railways, bridges, canals and other public works as members of the Corps of Engineers. Mahan is said to have taught military science to nearly all of the commanders on both the Union and Confederate sides of the Civil War.

As a professor Mahan was known for discipline, hard work and sternness. He demonstrated total dedication to his work and complete mastery of the subjects he taught. Although not openly displayed in the classroom, many graduates came to appreciate his warm and genial personality. He was known to intervene on behalf of struggling cadets and was intensely proud of the professional achievements of his former students.
Proposed $42.6B high-speed rail in California causes stir
A proposed 800-mile-long, high-speed rail line from Anaheim, Calif., to San Francisco will cost an estimated $42.6 billion, funded through private and public sources, including bonds. Economic officials predict the rail could create 165,000 construction jobs and about 6,000 permanent jobs. Anaheim residents are concerned about the staggering price and the demolition of homes because of the project, which could be operational by 2020. The Orange County Register (Calif.) (1/21)

Graduate students re-imagine eastern half of S.F. Bay Bridge
The crumbling eastern half of the San Francisco Bay Bridge served as creative fodder for a graduate course at University of California Berkeley’s College of Environmental Design. Student designs for the bridge ranged from suspended gardens to a hotel that resembles the bow of a ship. "There's no reason it can't be transformed into something wondrous, a fusion of nature and the machine," said Frederic Schwartz, a New York architect. San Francisco Chronicle (1/12)

California adopts nation’s most eco-friendly building code
California has adopted the most ecologically friendly -- and strict -- building code standards in the country. The new code, nicknamed Calgreen, takes effect in January 2011. Builders will be required to install plumbing that lowers water use, recycle 50% of construction waste and use low-pollutant paints, carpets and flooring. "This ...integrates green construction practices into the very fabric of the construction code," said Tom Sheehy, chairman of the California Building Standards Commission. San Francisco Chronicle (1/13)

California launches fleet of trash-powered trucks
Hundreds of garbage trucks in California are now powered by natural gas made from rotting household waste. Methane from decomposing trash is captured at the Altamont landfill in Livermore, which produces 13,000 gallons of liquefied natural gas per day. ABC News/The Associated Press (1/5)

Report: New sports complex in Sacramento would bring 4,000-plus jobs
A new report suggests that building a new sports and entertainment center in Sacramento would bring upwards of 4,000 jobs to the region, including 375 permanent positions. "A new entertainment and sports facility will be a huge job generator for our region," said Matt Mahood, president of the city's chamber of commerce. "I say let's get it started!" American City Business Journals/Sacramento, Calif. (1/7)

San Francisco developers return to Treasure Island
Officials are close to green-lighting a $6 billion redevelopment of Treasure Island, the mothballed naval base in San Francisco Bay. The plan would see four skyscrapers and up to 8,000 homes built on the 400-acre manmade island, which would also gain a direct ferry connection to San Francisco. The Wall Street Journal (1/9)

California to tear down San Clemente Dam
California plans to tear down the 106-foot San Clemente Dam, which would be the largest dam removal project in the state. The 1921 dam was declared unsafe in 1991 and the reservoir behind it is 90% silted up. The dam's owner, California American Water Co. decided to tear it down after conservation groups lobbied for the dam's removal. Cal Am will provide $50 million toward the cost of dam removal, with federal and state agencies working to cover the remaining $34 million. San Jose Mercury News (Calif.) (1/11)
January Luncheon Meeting Recap

The branch was pleased to welcome Andy Sokol from STV, Inc. and Riverside County Transportation Commission (RCTC) staff to our January branch luncheon meeting at Mexicali Bar & Grill in Riverside. Andy and RCTC staff spoke to us about the San Jacinto Branch Line Commuter Rail (Perris Valley Line) project. The Project is a 24 mile extension of the Metrolink 91 Line, currently providing service from Riverside to Fullerton and downtown Los Angeles.

The extension would begin at the existing Riverside-Downtown Station in the City of Riverside and proceed north on the Burlington Northern Santa Fe Line for approximately three miles before turning southeast along the San Jacinto Branch Line. The terminus of the Line is in the City of Perris at Route 74 and Ethanac Road in Perris.

Upon start up, the Perris Valley Line Project will have four new stations with provisions for two stations later to meet future demand. It will operate through three cities (Riverside, Moreno Valley, and Perris), bringing commuter rail service to major employment centers. The project will also provide communities such as Hemet, San Jacinto, Murrieta, Lake Elsinore, Menifee, Wildomar and Temecula closer access to the Southern California commuter rail network.

Riverside County is one of the fastest growing counties in the nation, projected to reach 3 million people by 2020. By that time, the number of vehicles using the I-215 Corridor is expected to increase to 200,000 per day. The Perris Valley Line would help relieve traffic congestion along its entire route, improving conditions on the I-215, SR-60, and SR-91.

The Perris Valley Line would attract an estimated 5,700 riders daily, providing them a 40-minute commute from South Perris to downtown Riverside compared to the projected 80-minute

(Continued on page 10)
Inspire kids during February's Engineers Week

Are you getting ready for Engineers Week 2010, Feb. 14-20? This year's theme, Discover Engineering, is a call for engineers everywhere to help kids discover the fun and excitement of engineering, and in turn, celebrate engineer volunteerism. ASCE can help you plan events that you can tie into the week. Get a free Engineers Week packet containing loads of information to inspire your outreach activities. The packet includes posters, a schedule of Engineers Week activities, ideas about and links to volunteer activities, and more. Contact the Pre-College Outreach team at outreach@asce.org to get your packet today!

ASCE presses for long-term infrastructure solutions

The fact is, in recent decades we've stopped investing in our future. We are still driving on Eisenhower's roads and sending our kids to Roosevelt's schools. The broken water mains, gridlocked streets, crumbling dams and levees, and delayed flights that come from failing infrastructure have a negative impact on the checkbook and on the quality of life of each and every American. Investing in America's infrastructure will support and create jobs -- an essential function for economic recovery -- as well as bring tangible personal benefits to Americans, like safer communities, less money spent on gas and more time with our families due to shorter commutes. The President's leadership on infrastructure is essential for our future prosperity. We need a bipartisan commitment to create a long-term plan for our infrastructure; one that includes sufficient funding levels and dedicated revenue sources. Without that, anything we do now will be nothing more than a band-aid. Contact your U.S. Senators and urge them to include a major infrastructure component in job creation legislation.
FREE PRE-CONFERENCE OUTREACH WORKSHOP
Pre-College Outreach is coming to San Diego!
*Inspire the Next Generation of Engineers:*
*Taking Civil Engineering to Kids!*

Date: Thursday, Feb. 25, 2010

Time: 5–8 p.m. (Dinner will be provided)

Location: San Diego Multi-Regional Leadership Conference
Balboa Room I & II
San Diego Marriott Mission Valley
8757 Rio San Diego Dr.
San Diego, CA 92108

*Learn how to:*

- Deliver the excitement of civil engineering to students using ASCE’s preK-12 outreach resources.
- Organize public outreach events.
- Combine hands-on fun with kid-tested engineering activities.
- Identify and work with partners, including PBS stations, museums and youth groups.
- Connect with others who share your interest. Learn about the *Outreach Has Its Rewards!* Project.

This event is FREE of charge, but advance registration is required via e-mail at outreach@asce.org by Thursday, February 18.
We began 2009 debating how the nation should go about stimulating the economy and creating jobs, and particularly the role of infrastructure investment. A year later, the discussion has turned to the successes and failures of the resulting American Recovery and Reinvestment Act (ARRA), and again, the role of infrastructure investment.

The urgency of channelling the stimulus funds into the economy meant that the funds went primarily to maintenance and "shovel ready" projects that would have otherwise been delayed, as opposed to new construction or capacity expansions. Some have questioned whether or not these investments have had the level of impact we all hoped that they would.

The Associated Press recently conducted an analysis of local investments versus rises or declines in that same local unemployment level. They concluded that, despite the investment, unemployment remained unchanged.

However, many of those conclusions were based on less than complete data. We have yet to see any solid data on the number of jobs that were saved or the long-term impact on business development. It is worth noting that the American Society of Civil Engineers (ASCE) has heard anecdotal evidence from its members that ARRA funds helped them to avoid or delay the layoffs they initially feared were inevitable. And, it’s important to keep in mind that infrastructure investment – not just the transportation spending mentioned in the AP piece, but all infrastructures spending – amounted to less than 10 percent of the overall stimulus package.

While further analysis is still needed to quantify the impact of the stimulus spending, it does seem to have made a difference. However, the short-term commitment envisioned as part of the stimulus is only one piece of the puzzle. If a long-term plan isn’t put into place – one that includes sufficient funding levels and a dedicated revenue source, such as the desperately needed six-year authorization of the surface transportation system – it could amount to nothing more than a band-aid.
**Finalists for ASCE's 2010 OCEA Award Announced**

The American Society of Civil Engineers has revealed the five finalists for the Society's 2010 Outstanding Civil Engineering Achievement (OCEA) award. Recognized for their contribution to the well-being of people and communities, resourcefulness in planning and design challenges, and innovation in materials and techniques, the 2010 award contenders are:

- **Arrowhead Tunnels Project** – Inland Feeder Program, San Bernardino, Calif.
- **Concordia University Wisconsin Lakeshore Environmental Enhancement and Education Project**, Mequon, Wis.
- **Sound Transit Central Link Light Rail: Section 710 Beacon Hill Station and Tunnels**, Seattle, Wash.
- **Sutong Bridge, Nantong City, Jiangsu Province, China**
- **Utah State Capitol Seismic Base Isolation and Restoration**, Salt Lake City, Utah

The award winner will be announced at ASCE's Outstanding Projects and Leaders (OPAL) Awards gala in Washington, D.C., next March 25.

**ASCE Congratulates the 2010 OPAL Award Winners**

Representing a model of achievement to which future generations of engineers aspire, five of civil engineering's leaders have been chosen by ASCE to receive 2010 Outstanding Projects And Leaders awards. By OPAL category, the honorees are:

- **Construction** -- Terence E. (Ed) Richardson, P.E., M.ASCE, of the Bechtel Corporation
- **Design** -- Man-Chung Tang, Ph.D., P.E., Dist.M.ASCE, NAE, of T.Y. Lin International
- **Education** -- David E. Daniel, Ph.D., P.E., Dist.M.ASCE, NAE, of the University of Texas at Dallas
- **Management** -- Robert D. Nichol, P.E., F.ASCE, of Moffatt & Nichol

ASCE celebrates the achievements of these civil engineering leaders, who have been the forces behind many important, recognizable infrastructure systems. Join them next spring as they receive their awards at the Society's OPAL Gala in greater Washington, D.C.
IECES INLAND EMPIRE COUNCIL OF ENGINEERS AND SCIENTISTS

Presents

Inland Feeder: Enhancing Water Supply Reliability in Southern California

John V. Bednarski
Metropolitan Water District of Southern California

Metropolitan Water District of Southern California’s (MWD) $1.2 billion Inland Feeder project, including 44-mile long series of tunnels and pipelines, fully integrates MWD’s distribution system, connecting State Water Project supplies with the Colorado River Aqueduct to flow into Diamond Valley Lake. The project nearly triples MWD’s water delivery take away capacity from the State Water Project’s east branch.

Date: Tuesday, February 16, 2010
Location: University of Redlands, Casa Loma Room
Times: 6:00 p.m. Social
7:00 p.m. Dinner
7:30 p.m. Society Announcements
7:45 p.m. Program
8:45 p.m. Question and Answer Period
9:00 p.m. Adjournment

Directions:
From eastbound Interstate 10: Take the University Street exit and turn left onto University Street.
From westbound Interstate 10: Take the Cypress Avenue exit and turn left. Drive two blocks to University Street and turn right.
Continue north on University Street 0.8 miles to the Brockton Avenue stop sign and make a right. After one block, turn right into either the 3rd or 4th driveway to enter the parking lot (Ted Runner Stadium will be across Brockton). The Casa Loma Room is on the east side of the lot.

Advance Reservations Required

Name: __________________________ Telephone: __________________________ Number of Guests: ________
E-mail: __________________________ Name(s) of Guest(s): __________________________

Organization: □ AIAA □ ASCE □ ASME □ CSPE □ IEEE □ SAME □ APIWA □ Other

Meals Selection: □ Roast Prime Rib of Beef □ Chicken Porcini □ Grilled Vegetable Lasagna (Vegetarian)

Total Amount Enclosed: ________________ ($25 per engineer and/or guest; $15 per student)

Seating is limited.

Please mail reservations and checks (payable to IECES) for receipt on or before Feb. 12, 2010 to:

IECES, c/o Tom Crowley, Treasurer, 115 Hillside Way, Redlands, CA 92373
Phone (909) 213-7055 E-mail: tj.crowley@verizon.net
The Perris Valley Line will operate primarily on track used as a freight rail line for more than 120 years. Establishing Metrolink service on this track will transfer the responsibility of track maintenance, repair and the upkeep of rail right of way away from privately-owned railroad to the Riverside County Transportation Commission (RCTC). RCTC is overseen by local, elected officials who hold regular public meetings and are accessible to respond to community concerns.

The Small Starts extension will travel on the San Jacinto Branch Line, purchased by RCTC in 1993, which runs parallel to I-215, one of the most heavily traveled and congested freeways in the region.
If you’d like to have your business card or company information listed in the Professional Directory, Please Contact:
The Branch Treasurer, Rita Escobar, at (714) 567-2498 or email at rita.escobar@aecom.com

Membership Information
Type of Membership and Annual Dues (National)

- Students: Free
- Associate Member: $50 year of baccalaureate degree and first year after, then incremental increases to $205 over five years.

- Member: $205 annually
- Affiliate: $205 annually

- Section (Branch) Dues: $45/year

1. National ASCE Student Membership is now FREE! Those who have chapters or clubs still must be a member of them before joining National. Log onto https://www.asce.org/online/ fill out the short application and instantly become a member of ASCE or call 1-800-548-ASCE (2723)

2. Online Membership renewal available, go to https://www.asce.org/renewal/inforenewal.cfm. You need your membership number, all payments must be made with a major credit card. An e-receipt is transmitted to the member upon completion of the transaction.
Mark Your Calendar

John V. Bednarski from Metropolitan Water District of Southern California (MWD) will be speaking about the $1.2 billion Inland Feeder project, including 44-mile long series of tunnels and pipelines, fully integrates MWD’s distribution system, connecting State Water Project supplies with the Colorado River Aqueduct to flow into Diamond Valley Lake.

**Branch Meeting**

Date: Tuesday, February 16, 2010  
Time: 6:00 pm—9:00 pm  
Location: 1200 E. Colton Ave  
Redlands, CA 92373  
Cost: $25 per engineer and/or guest; $15 per student  
Deadline: February 12, 2010

**Branch Meeting Luncheon**

Date: Wednesday, March 24, 2010  
Time: 11:30 am—1:30 pm  
Location: San Bernardino Hilton  
285 E. Hospitality Lane  
San Bernardino, CA 92408  
Cost: Members w/RSVP $25; non-members or no RSVP $30; Students $12.5  
Deadline: March 18, 2010

Francis Gbondo  
Newsletter Editor  
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Corona, CA 92881