President’s Message

Last month I attended the 4th annual Leonard Transportation Center (LTC) Forum in Ontario and listened to various topics pertaining to a holistic approach to meet our regional transportation and development needs. The forum did not focus entirely on transportation issues and solutions, but I had to remind myself that this forum was intended to address the cross-roads of transportation, air-quality, land-use planning. And it was in this reminder that I found a connection with both ASCE policy and the Society’s vision for Civil Engineering.

The Forum brought together officials from SAN-BAG, Caltrans, local business leaders, and local government officials to discuss the challenge of meeting our infrastructure needs, primarily transportation, along with meeting air quality and sustainability while boosting our regional economic vitality. Needless to say the task sounds daunting. However this should not be seen as anything new to active ASCE members. In 2006 Our Society envisioned an enhanced role for civil engineers in the near future. See our ASCE website under Issues and Advocacy to read the Vision for Civil Engineering in 2025. Among the stated goals for this vision is for Civil Engineers to serve as; Leaders in discussions and decisions shaping public environmental and infrastructure policy.

The basis for the LTC Forum conforms to a few ASCE policy statements such as PS 327, and PS 131.

See page 8 for more about this forum.

Brian D. Wolfe, PE  ASCE President, San Bernardino/ Riverside Counties Branch of the LA Section of ASCE
June 2010 This Month in history

Coconino County, Arizona
Completed 1929

Navajo Bridge spans Marble Canyon, 470 feet above the Colorado River in Grand Canyon National Park. It was considered the highest steel arch bridge in America when completed.

The Navajo Bridge (also known as the Grand Canyon Bridge) was built in 1929 by the Arizona Highway Department and provided a vital transportation link over the Grand Canyon between northern Arizona and southern Utah. Construction commenced by building on one side of the canyon, then on the other, until the two sides met in the middle.

During construction, a ferry was essential for transporting men, tools, construction materials and heavy building equipment. However, on June 7, 1928, high waters, a weakened ferryboat, and worn cables resulted in disaster. The ferry capsized with three men and a Model T Ford on board. Coconino County refused to replace the ferry, causing extensive construction delays.

For the next seven months, construction equipment and materials were brought in by truck, requiring an 800-mile journey around the canyon.

Facts

Navajo Bridge spans Marble Canyon, 470 feet above the Colorado River in Grand Canyon National Park and was considered the highest steel arch bridge in America when completed. The 750-foot-long steel bridge includes a 616-foot, three-hinged spandrel arch main span. It replaced Lees Ferry as the sole crossing of the Colorado River within a distance of 600 miles. The bridge was functional for the era in which it was constructed. However, its load capacity of 22.5 tons and width of just 18 feet failed to serve the needs of modern vehicles. Studies began in the early 1990s to determine the best solution to the problem. Consideration was given to strengthening the bridge, but the costly option was deemed impractical. Several alternate sites were considered, but the final decision was to build a stronger and wider parallel bridge beside the existing structure. The new bridge was completed in 1995 and the original structure remains in service as a pedestrian crossing.

RMHwin

Rational Method Hydrology software for San Bernardino, Riverside & Orange counties in Windows

By Jack P. Norris, RCE

For complete information and pricing, and to download a trial version, please visit JPNRCE.com
Heider Engineering Services, Inc., established in 1996 by Dennis Heider, a registered Civil Engineer, specializes in “Special Inspection”, Geotechnical Engineering, Grading Inspection and Construction Materials Testing.

Nikki Heider, president of the firm oversees all aspects of the business operations, including finance, managing personnel, profit control and future growth. Our laboratory is capable of testing most construction materials, including compressive strength testing up to 500,000 lbs. total force and rebar tensile testing up to 300,000 lbs. total force. We provide significant aggregate testing, for ASTM C 33 requirements, including Los Angeles Abrasion Testing and sulfate soundness testing. Our laboratory is DSA and LA City approved. Field testing equipment includes pull testing equipment, Skidmore-Wilhelm High Strength Bolt Testing and coring equipment for concrete, masonry and asphaltic concrete.

Complete Geotechnical Engineering services are managed by Gary Goldman, a registered geotechnical engineer. Offered services include soil investigations, laboratory testing and geotechnical recommendations for foundations, slopes, retaining walls and structural fill. In addition, soil grading inspection is provided by field soils technicians.

Heider Engineering services, Inc.
800-A South Rochester Avenue
Ontario, CA 91761
(909)673-0292
www.heiderengineering.com

Dennis W. Heider
Principal Engineer

Monica “Nikki”Heider
President

Gary R. Goldman, PE, GE
Principle Geotechnical Engineer
On February 26-27, Younger Members from all over the western region attended the Western Regional Younger Member Council (WRYMC) in San Diego, California. At the conference, Younger Members got a better glimpse of the direction civil engineers are heading and what will be expected of a civil engineer in the year 2025. The WRYMC conference also provided invaluable information and encouraged discussions that provided tools that could be used in the workplace and/or brought back to our respective Younger Member branches to be used for improvement. Speakers from diverse backgrounds and viewpoints presented impressionable information that encouraged us to reassess our viewpoints and ourselves. To broaden our knowledge of recent civil engineering projects, technical tours of the Padre Dam Municipal Water District, San Vicente Dam Raise and Twin Oaks Water Treatment Plant were arranged. Despite the rain, tour guides and San Diego YMFers were troopers and relentlessly provided an informative tour. And as always, WRYMC provided abundant opportunities to network, network, network. Thank you San Diego YMF for hosting a memorable WRYMC conference!

ASCE-YMF General Meeting
By: Julianna Gonzalez

On March 2, 2010 HDR hosted a meeting in their Riverside office with our local San Bernardino-Riverside YMF group and presented their contribution to the construction of the world’s first commercial SlurryCarb facility. The 270,000 ton per year facility is located in the City of Rialto, on recycled land that used to be a landfill. The facility provides a recycling plan for five municipalities including the Los Angeles region, Sanitation District of Los Angeles County, Orange County Sanitation District, San Bernardino Municipal Water Department, City of Riverside, and the City of Rialto, by converting their bio-solids into a renewable solid fuel, called E-fuel. Unlike coal, E-fuel produces no mercury or sulfur dioxide when burning and does not emit additional sources of CO2. The SlurryCarb process utilizes existing CO2 and then emits this same CO2 back into the atmosphere- Since coal is underground and not exposed to the air, when it burns it adds more CO2 to existing ground. The thing that amazed me most was the efficiency of the centrifuge and polymer. The specific chemical make up of the polymer efficiently paired with the appropriate centrifuge increases the mass percentage from 50% solids by mass to about 96% solids by mass. It was interesting to see how the new processes works. Thank you, Sean Hoss and HDR for the fantastic presentation.
White Water Rafting Trip

Where: Upper Kern River
11300 Kernville Road
Kernville, CA 93238

More Information & Directions: www.sierrasouth.com

Date: Sunday, June 27th, 2010
Time: 8:30 am
Who: ASCE LA YMФ Groups
What: Full-Day Rafting Level III-IV

Cost: $180.00 per person (Includes all equipment, camping, parking and all meals and drinks)

$150.00 per person without camping

Deadline to sign-up June 18, 2010
Make Check payable to: OC-YMF
Rocio Duran
P.O. Box 341236
Arleta, Ca 91334-1236

Camping (Optional)

Where: Frandy Camp Site
11252 Kernville Rd
Kernville, CA 93238

Date: Friday & Saturday, June 25-27th, 2010
Time: Anytime after 2pm Check-in
Food & Drinks included!

Cost: Included with price

For More Information: http://www.frandy.net/

Must bring with you

- Driver’s License
- Clothes that can get wet
- Shorts or Bathing Suits Dry
clothes to change
- Tennis Shoes or River Sandals
- Sleeping Bag (if Camping)
- Tent (if Camping)
- Sunscreen
- Hats & Visors
- Sunglasses

For questions, contact:
Rocio Duran at 714-614-0727
(rduran129@hotmail.com)
MENTORING PROGRAM WORKSHOP

The Mentorship Committee is pleased to announce the second phase of the Mentoring program. The purpose of this mentoring program is to provide a service to our members and facilitate the sharing of knowledge and growth between engineers. The Committee will host a workshop on Saturday, June 5th, 2010. We plan to announce the matching of the Mentors and Protégés pairs and discuss the mentoring program. We are asking everyone interested in being a participant in the mentoring program to complete and submit the attached application by May 28th, including past participants.

Agenda:

11:00 – 11:30 Registration
11:30 – 11:40 Welcome, Opening remarks, Ice Breaker
11:40 – 12:30 Presentation
12:30 – 1:30 Lunch/Discussions
1:30 – 1:40 Mentoring Program Logistics
1:40 – 2:00 Wrap-up & Final Comments

Cost: $5 per Registered Attendee (Lunch and beverages included)

Attendance is limited, therefore an RSVP is required. Please reply by May 28th.

Location: URS Corporation (Ontario Office)
3500 Porsche Way
Ontario, CA 91764

For additional Information, please contact Alfred Pedroza at (909) 933-5225 x228 or Jessie Powell at (909) 980-4000, (909) 933-5228 Fax

SAVE THE DATE

2010 ASCE YMF Charity Golf Tournament

Friday, June 11th
Eagle Glen Golf Club
Located in Corona, CA
all proceeds to benefit charity
more details coming soon see projectpartners.com
2009-2010 Awards Program
June Meeting

The San Bernardino & Riverside Counties Branch of the American Society of Civil Engineers has developed an awards program to recognize local Civil Engineers and projects. The Branch has established the following local awards for 2009-2010: Civil Engineer of the Year (Private & Government), Young Civil Engineer of the Year Award, Outstanding Civil Engineering Project Award, and Civil Engineering Project Improvement Award.

Date: Wednesday, June 23, 2010
Time: 11:30am to 1:30pm
Location: Dave & Buster's of Ontario
4821 Mills Circle
Ontario CA, 91764
Cost: $25 Members w/ RSVP
$30 non-members or no RSVP
$12 Students
Deadline: 6/18/10
Contact: Rita Escobar (714) 567-2498

NEWSLETTER INFORMATION

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  - 1/2 Page (per issue) $125
  - 1/4 Page (per issue) $75

Advertising Information:
To place ads, contact the editor. Payments are due 30 days from the date of publication. Copies must be received by the Editor by the 3rd Thursday of the month prior to publishing.

For Billing information contact:
Rita Escobar at 714-567-2498
Email at rita.escobar@aecom.com
4th Annual Leonard Transportation Forum

The Leonard Transportation Center was established in 2006 to facilitate research and education pertaining to transportation in the Inland Empire. Located at Cal State University, San Bernardino the Center focuses on policies and practices that impact the effective movement of people and goods in the IE. The Center’s 4th annual forum explored the intersection of Transportation, Land Use, Air Quality and Energy. One fact frequently referred to is that governance systems are place-based while concerns such as air quality, goods movement, and energy transcend those boundaries. The Center is concerned in part with the collaboration of governing systems and agencies to address those concerns while meeting our regional transportation needs.

There was also discussion about missed opportunities to create jobs in this area. 1 out of 10 jobs in the Inland Empire is related to logistics. Given the tremendous volume of goods entering and passing through southern California there is the potential to create jobs by attracting manufacturing to the IE. Many rail containers arrive full to local warehouses and distribution centers but leave empty. Local manufacturing, staffed with graduates from regional colleges, can produce goods that will leave the region on those same containers, thereby boosting the local economy.

This increase in activity will require new infrastructure and intermodal facilities as well as the means to manage the volumes of rail, truck, and commuter traffic. Naturally this poses a problem for emissions restrictions and air quality standards, which the IE is not prepared to meet.

Considerable collaboration will need to be maintained among various agencies for the long term to meet the needs and issues for transportation, air quality, and planning for the Inland Empire.

You can learn more about the Leonard Transportation Center at: www.leonard.csusb.edu
June Awards Luncheon

On Wednesday June 23rd, your Branch will be hosting our Annual Awards Luncheon at Dave and Buster’s in Ontario at 11:30 am. Come meet Neil Nilchian and Manual Delgado and find out what it takes to be an Engineer of the Year.

In addition, we have our Project of the Year and Project Improvement of the Year Awards. What project is the Project of the year? Our nominees are:

The Mountain View Bridge Widening Project, City of Loma Linda
The Oak Glen Detention Basins, Yucaipa
The Haven Avenue Grade Separation Project, City of Rancho Cucamonga
The John W. North Water Treatment Plant, City of Riverside

Come see if your choice is the Project of the Year! See page 7 for meeting details.

May Meeting Recap

At our May meeting in Riverside Norm King, the Executive Director of SanBAG spoke about future transportation projects in the Inland Empire. He provided a lot of information in a short time span. We recommend that you attend the monthly meetings to hear the latest information first hand.
### Calendar of Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Time</th>
<th>Location/Details</th>
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<tbody>
<tr>
<td><strong>Mentorship</strong></td>
<td>June 5th 11-2</td>
<td>See page 6 for more information</td>
</tr>
<tr>
<td><strong>YMF Golf Tournament</strong></td>
<td>June 11th</td>
<td>See projectpartners.com for more information</td>
</tr>
<tr>
<td><strong>Awards</strong></td>
<td>June 23rd 11:30-1:30pm</td>
<td>Dave &amp; Busters Ontario; See page 7 for more information</td>
</tr>
<tr>
<td><strong>YMF White Water</strong></td>
<td>June 27th 8:30am</td>
<td>See page 5 for more information</td>
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### Surgeons Know Best about Engineers

Five surgeons were taking a coffee break and discussing their work. The first said, "I think accountants are the easiest to operate on. You open them up and everything inside is numbered." The second said, "I think librarians are the easiest to operate on. You open them up and everything inside is in alphabetical order." The Third said, "I like to operate on electricians. You open them up and everything inside is color-coded." The fourth one said, "I like to operate on lawyers. They're heartless, spineless, gutless, and their heads and their butts are interchangeable." Fifth surgeon said, "I like Engineers...they always understand when you have a few parts left over at the end..."
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

<table>
<thead>
<tr>
<th>Type of Membership and Annual Dues (National)</th>
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<tbody>
<tr>
<td><strong>Students:</strong></td>
<td>Free</td>
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<tr>
<td><strong>Associate Member:</strong></td>
<td>$50 year of baccalaureate degree and first year after, then incremental increases to $205 over five years.</td>
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<tr>
<td><strong>Member:</strong></td>
<td>$205 annually</td>
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<tr>
<td><strong>Affiliate:</strong></td>
<td>$205 annually</td>
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<tr>
<td><strong>Section (Branch) Dues:</strong></td>
<td>$45/year</td>
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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.