MESSAGE FROM THE PRESIDENT

I want to begin by saying thank you to Mark Vessely for all his time and efforts as the 2011 CAGE President. Mark will be a tough act to follow. I would also like to thank John Hart for his service on the CAGE board the past several years. John’s tenure on the Board is up and his commitment to improving both CAGE and the Geotechnical Engineering Profession was obvious at the very first Board meeting I attended several years ago. His actions throughout the last several years have proven that commitment many times over. I feel very confident in saying that John’s efforts have greatly improved CAGE as an organization. John has graciously volunteered to continue to be involved with CAGE Scholarship (and I am sure we will try to convince him to help with other items as well).

Tom Szynakiewicz won the election for the 2012 director position. Congratulations Tom. Thanks to Josh Barker for accepting the nomination. It was a close vote and I hope Josh considers running again next year (it took me a few times to get elected). I also want to congratulate Wayne Thompson for becoming the President of the Northern Colorado Section of CAGE. He will be taking over for Robin Dornfest. The following are the 2012 CAGE Officers and Directors

- President: Aaron Bagley
- Vice President/Treasurer: Paul Jordan
- Secretary: Andy Garner
- Past President: Mark Vessely
- Director: Tonya Hart
- Director: Robin Dornfest
- Director: Tom Szynakiewicz
- Northern Colorado Section President: Wayne Thompson

Because of winter break, we are still in the process of scheduling interviews with candidates at CU Boulder and CSM for the 2011 CAGE Scholarships. Thank you to John Hart and Mark Vessely for arranging the CU and CSM interviews. We hope to get those interviews wrapped up in the next couple of weeks. CAGE is also providing scholarship funds to CSU this year. We are taking a different approach with CSU. Instead of awarding a scholarship to an individual we will be donating funds to the ASCE Student Chapter at CSU for use on geotechnical activities. Thank you to Robin Dornfest for arranging the CSU donation.

Hopefully you have seen and read the announcement for this month’s meeting which is a joint meeting with the Structural Engineers Association of Colorado (SEAC). The announcement is attached to the newsletter. Following that same theme our Northern Colorado Section is having a joint meeting Thursday, January 12 with the Northern Section of ASCE. The topic of that meeting will be the Lake Mead Third Intake Tunnel presented by Mr. Gregg Sherry of Brierley Associates.

If you haven’t already, please submit your 2012 membership renewal form and dues. If you have any questions please contact Becky Roland at admin@cagecolorado.org.

I am going to wrap things up with a request to all CAGE members. And that is to consider becoming involved with CAGE beyond attending the meetings (but please keep attending the meetings). We have various committees and tasks that we can always use help with or if you have any suggestions on topics or technical issues that you believe CAGE should become more involved with please feel free to contact myself or any of the other Board members.

Aaron Bagley, P.E. abagley@acesare.com 303-220-0300
JANUARY CAGE MEETING

Wednesday, January 18, 2012
11:30 A.M. – 1:00 P.M.
Lakewood Country Club
6800 W. 10th Avenue, Lakewood

CAGE accepts prepayment of luncheon registrations online. Click on the January 18 event on the calendar at www.cagecolorado.org.
Please note that refunds will not be given if you must cancel or are not able to attend.

The Geology of Seismic Site Class and the Effect of Site Class on Structural Design
A Joint CAGE/SEAC Event

Presenter: David Butler, Zonge International, Inc.

At least seven methods are used to measure Vs30. The gold standard of these measurements is crosshole seismic testing followed by in order of decreasing quality (and cost) downhole seismic, P-S suspension logging, cone penetrometer, s-wave refraction, multi-channel analysis of surface waves (MASW) and refraction microtremor testing (Remi). Suspension logging, seismic cone, and s-wave refraction are seldom used due to difficult equipment, depth limitations, and interpretational barriers. Crosshole seismic has an ASTM standard (6429) but is costly. The other two methods depend on the correlation of surface wave velocities and s-wave velocities in layered rocks. The dispersion of surface waves makes them effective in noisy, i.e. most urban, situations. Building codes and regulations attempt to sort natural materials into categories, specifically site classifications by Vs30 values. Mother Nature frowns on this engineering technique and has placed most building sites in the Denver at the boundary of site class C (Vs30>1200 ft/s) and D (Vs30<1200ft/s). A statistical compilation of more than 30 sites near Denver will be presented. Depth to bedrock variations and precision of the measurements are the two main contributors to a potential error of up to 8-12%. The sounding model used for calculation in the surface techniques is one-dimensional; the measurement is two (or three) dimensional using a line up to 300 feet long. Engineering judgment is required when the Vs30 comes out as 1199 ft/s or when severe bedrock topography is measured or suspected. The exposure of the site to potential seismic events is an additional factor usually underestimated in the Denver area.

Please FAX or email your reservations before noon, Monday, January 16, 2012 to:
Becky Roland, CAGE
Fax: (720) 230-4846, admin@cagecolorado.org

You can RSVP online at www.cagecolorado.org. Just click on the January 18 event!

Walk-ins may not be guaranteed a meal, so please RSVP by January 16!
$25 for CAGE members, $30 for non-members, $15 for students
CALL FOR PAPERS

2012 COLORADO GEOTECHNICAL SEMINAR
ROCKY MOUNTAIN GEOCHALLENGES
RISING TO GEOTECHNICAL CHALLENGES IN COLORADO

November 9, 2012
Sheraton Denver West Hotel
Lakewood, Colorado

Abstract Deadline: January 27, 2012

The Geotechnical Group of the Colorado Section of the American Society of Civil Engineers (ASCE), the Rocky Mountain Section of the Association of Environmental & Engineering Geologists (AEG), and the Colorado Association of Geotechnical Engineers (CAGE) have sponsored a one-day geotechnical seminar every other year since 1984. The theme of the 2012 seminar will be “GeoChallenges: Rising to Geotechnical Challenges in Colorado.” The seminar will focus on case histories of challenging geotechnical projects in Colorado and the Rocky Mountain Region. Papers are welcome from all practice areas including transportation, water resources, mining, development, environment, and natural resources.

The papers accepted for the 2012 Colorado Geotechnical Seminar will again be published by ASCE as a Geotechnical Practice Publication (GPP) and distributed at the seminar. The ASCE Geo-Institute has developed the GPP for use by local sections, branches, and others as a vehicle for publishing their proceedings within an appropriately short timeline using a simplified review process.

Additionally, the Steering Committee welcomes abstracts from students to be accepted for a poster session competition. Accepted student abstracts will be requested to complete a poster and present it during the poster session of the seminar. A small committee will judge the posters and brief oral presentations at set times on the day of the seminar. Winner(s) will receive a cash prize.

Thank you in advance for your interest.

The Geotechnical Seminar Steering Committee
Potential topics for papers and student abstracts include, but are not limited to, the following:

**Transportation**
- Transit construction for RTD
- Corridor expansion
- Tunneling in urban or mountain environments
- Mechanistic pavement design

**Environment**
- Resource management
- Colorado groundwater supply and aquifer recharge
- Utilization of recycled materials in geotechnical construction

**Aging and Rehabilitation of Infrastructure**
- Retrofitting aging facilities
- Unknown foundations
- Design and construction in developed areas

**Investigation and Testing**
- “Intelligent” construction
- Instrumentation and monitoring
- Laboratory and in-situ testing
- Research and analysis of unknown foundations for existing structures

**Water Resources**
- Dam design, construction, monitoring, and rehabilitation
- Levee evaluation and rehabilitation
- Reservoir expansion and transmission improvements

**Innovations in Geotechnical Engineering**
- Earth and structure retention
- Ground improvement
- Soil-structure interaction
- Geophysical methods
- Remote sensing
- Innovative project delivery
- Thermal foundations

**Mining and Energy**
- Geotechnical activities in support of mine and energy development
- Mine reclamation

**Case Histories**
- Unique local projects: Colorado/Rocky Mountain experience (recent and historical)
- Successes and failures
- Other large scale Colorado projects

The Geotechnical Seminar Steering Committee requests that individuals interested in preparing and presenting a paper submit a brief (approximately 200-word) abstract in Microsoft Word for review. Please email your abstract as text within the body of the email to Christoph Goss at christoph.goss@deereault.com by 5:00 PM Mountain Time on January 27, 2012. With the abstract, please indicate your name, your role in the subject matter, your daytime telephone number, and your return email address. This abstract is for informal Steering Committee review, not for publication. Selected authors will be notified by February 24, 2012, and will be given a set of simple guidelines and a template for developing an electronic version of the paper. An electronic draft of the paper is due by May 4, 2012 for review by ASCE. Review comments on the draft paper will be provided to the author by June 8, 2012. The revised electronic copy of the final paper is due by July 6, 2012. The collection of papers will be published by ASCE as a national Geotechnical Practice Publication, which will be provided to the Geotechnical Seminar attendees. Approximately twelve of the published papers will be chosen by the committee to be presented at the seminar. Individuals presenting their GPP paper should prepare a PowerPoint presentation and plan to speak for 20 to 30 minutes.