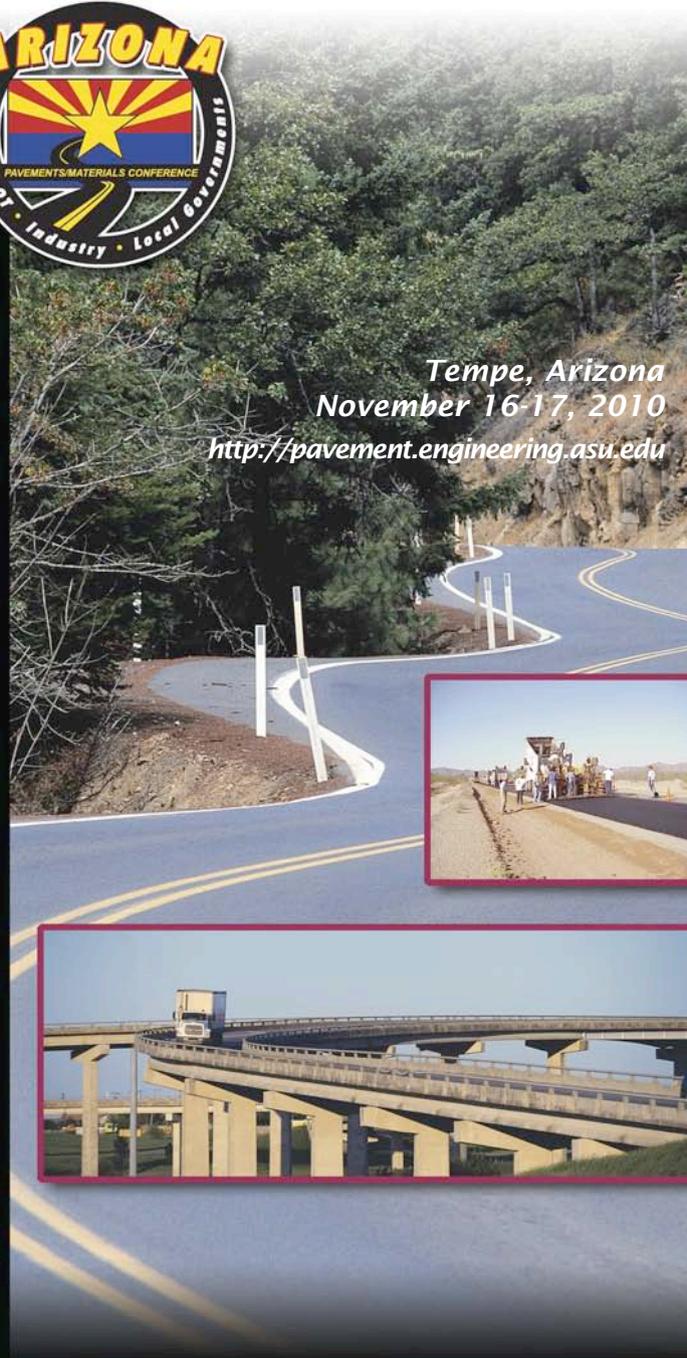


6<sup>th</sup> ARIZONA PAVEMENTS/MATERIALS CONFERENCE



Tempe, Arizona  
November 16-17, 2010

<http://pavement.engineering.asu.edu>



## 6<sup>th</sup> Arizona Pavements/Materials Conference Program Overview

A two-day conference on “**Sustainable Practices**” sponsored by Arizona State University (ASU), Arizona Department of Transportation (ADOT), Arizona Industry, and Local Governments will be hosted by ASU on November 16-17, 2010. The conference will be held at ASU’s Memorial Union on the Tempe Campus.

The conference will include nationally recognized speakers who will address the audience on National and Arizona perspectives of future pavement technology and how it affects our way of life.

The conference will include sessions on asphalt and concrete pavements technology, recent innovations in pavement design and construction management, and updates on National NCHRP, Federal Highway Administration and ADOT pavement performance research. Updates on the latest emerging construction technology advances will also be included.

Some of these topics include:

- Asphalt Market Economic Analysis
- Alternate Project Delivery Methods
- Thin White-Topping-Local Case Studies
- Integrity Testing of Drilled Pier Foundations
- Reconstruction in Afghanistan
- Tempe Town Lake Light Rail Bridge Inspection
- Chipsealing Returns to Phoenix
- Sustainable Pavements
- Concrete Market Economic Analysis

## International Symposium on Advances in Transport Sustainability (ISATS)

The Pavements/Materials Conference is being held in conjunction with the first International Symposium on Advances in Transport Sustainability, presented by the International Road Federation and the Association of Transportation Professionals of Indian Origin. The symposium “**Building a Green Future**” will run from 3:30pm November 17 to 1:30pm November 19, 2010 at the Memorial Union. Attendees are welcome to take advantage of their visit to Tempe to attend and participate in both conferences. Those wishing to attend both conferences can take advantage of a single discount registration fee (payment of this joint registration fee will allow entry to all sessions and events of both conferences). Register online at <http://www.isats2010.org> or by completing the attached registration form.

### GRADUATE STUDENT RESEARCH PROJECTS

- Improved Environmental Factors for Resilient Modulus
- Analysis of Subgrade Permanent Deformation
- Route 202 Design-Build Project
- Trenchless Technology
- ACPA Green Pavements
- Glendale City-Wide Pavement Assessment
- Arizona’s Construction Economic Outlook
- Use of RAP by ADOT
- Intelligent Compaction
- Cost Effectiveness of Pavement Preservation

Everyone is invited to visit: <http://pavement.engineering.asu.edu> for more details of the conference as well as other workshops and seminars that are of interest to the Pavements / Materials / Construction / Transportation areas.

# 6<sup>th</sup> Arizona Pavements/Materials Conference - November 16-17, 2010

## "Sustainable Practices"

Preliminary Program (subject to change)

### Day 1 - Tuesday, November 16, 2010

8:00am-10:00am	Registration, Exhibits & Vendor Presentations - Continental Breakfast - Arizona Ballroom		
	General Session: Ventana Ballroom 241		Moderator: Doug Forstie, PBS&J
10:00am	Welcome from ASU	Sayfe Kiaei, Associate Dean, Ira A. Fulton Schools of Engineering, ASU	
10:10am	ADOT Overview	Dallas Hammit, Deputy State Engineer-Operations, ADOT	
10:20am	FHWA's "Every Day Counts" Initiative	Tom Harman, Federal Highway Administration	
10:30am	Arizona's Construction Economic Outlook	Lee McPheters, W.P. Carey School of Business, ASU	
11:00am	National Construction Economic Outlook	Ken Simonson, The Associated General Contractors of America	
11:30am	Reconstruction in Afghanistan	Charles Mouzannar, AMEC Earth & Environmental	
12:00pm	LUNCH: Arizona Ballroom 221 - (Community Service Awards Lunch) Moderator: David Martin, Associated General Contractors		
	Session 1: ASPHALT, Part 1 (Ventana Ballroom 241) Moderator: Tom Kaczmarowski, City of Glendale	Session 2: CONCRETE, Part 1 (Pima Room 230) Moderator: Tom Kilargis, Pima County Transportation Department	Session 3: PROJECT MANAGEMENT (Cochise Room 228) Moderator: Equbalali Charania, City of Phoenix
1:30pm	Asphalt Market Economic Analysis Bobby Franco, Vulcan Materials	Life Cycle Cost Analysis of Concrete Pavements Steve Tritsch, CMC Americas	Alternate Project Delivery Methods Wylie Bearup, City of Phoenix
2:00pm	Warm Asphalt Mixes Mark Belshe, Rubber Pavements Association	Revisions to ADOT & MAG Concrete Specifications Paul Sullivan, ADOT and Jeff Hearne, Salt River Materials Group	Cordes Junction CMAR Project George Wallace, ADOT
2:30pm	Every Day Counts-from Warm Mix to the Safety Edge Tom Harman, Federal Highway Administration	Thin White-Topping: Local Case Studies Kamil Kaloush, ASU	Route 202 Design-Build Project Adam Brahm, ADOT
3:00pm	BREAK: Arizona Ballroom 221		
	General Session: Ventana Ballroom 241		Moderator: Adrian Green, Vulcan Materials Company
3:15pm	CRAFCO's Experience Countering IEDs in Iraq & Afghanistan	Tim Morris, CRAFCO	
4:15pm	End of Day 1: Door Prizes (Ventana Ballroom 241)		
4:30-6:30pm	Reception in Turquoise Room (MU 220) for all attendees		

### Day 2 - Wednesday, November 17, 2010

7:00-8:00am	Registration, Exhibits & Vendor Presentations - Continental Breakfast - Arizona Ballroom		
	Session 4: ASPHALT, Part 2 (Ventana Ballroom 241) Moderator: Kamil Kaloush, ASU	Session 5: CONCRETE, Part 2 (Pima Room 230) Moderator: Stew Waller, Arizona Cement Association	Session 6: DESIGN, Part 1 (Cochise Room 228) Moderator: Claudia Zapata, ASU
8:00am	RAP-Altering Percentages vs. Design Control Don Cornelison, Speedie & Associates	ACPA Green Pavements Stew Waller, Arizona Cement Association	Pavement Design on Expansive Soils Brian Amos, Speedie & Associates
8:30am	Use of RAP By ADOT Chad Auker and Scott Weinland, ADOT	Grooved Concrete Pavement ADOT Noise Test Larry Scofield, ACPA	Subgrade Permanent Deformation Model Elham Bani Hashem, ASU
9:00am	Recycling Rubber A/C Mixes Doug Carlson, Liberty Tire Recycling	Concrete Market Economic Analysis	Performance Related Specs for Asphalt Construction Myung Goo Jeong, AMEC Earth & Environmental, Inc.
9:30am	BREAK: Arizona Ballroom 221		
	Session 7: MAINTENANCE (Ventana Ballroom 241) Moderator: Jeff Van Skike, Consultant	Session 8: CONSTRUCTION (Pima Room 230) Moderator: Ed Kavazanjian, ASU	Session 9: PAVEMENT PRESERVATION (Cochise Room 228) Moderator: Mike Mamlouk, ASU
10:00am	Keyhole Method of Pot Holing/Pipe Repairs Phil Cisneros, Southwest Gas	Intelligent Compaction	Final Report On Pavement Preservation Strategies David Peshkin, Applied Pavement Technology, Inc.
10:30am	Chipsealing Returns to Phoenix Chris Turner-Noteware, City of Phoenix	Soil Nail Design & Construction John Wolosick, Hayward Baker, Inc.	Pavement Management in Phoenix Equbalali Charania & Rubben Lolly, City of Phoenix
11:00am	Glendale City-Wide Pavement Assessment Wade Ansell, City of Glendale	Trenchless Technology Arvid Veidmark, Specialized Services Company	Cost Effectiveness of Pavement Preservation Mike Mamlouk, ASU
11:30am	Tempe Town Lake Light Rail Bridge Inspection Mike Ziegler, City of Phoenix	Contract Management Sam Hanna, City of Phoenix	Sustainable Pavements Gerardo Flintsch, Virginia Tech
12:00pm	LUNCH: Arizona Ballroom 221 - (Sponsors/Exhibitors Awards Lunch) Moderator: Steve Trussel, Arizona Rock Products Association		
	Session 10: STUDENT PRESENTATIONS (Ventana Ballroom 241) Moderator: Mena Souliman, ASU	Session 11: PAVEMENTS (Pima Room 230) Moderator: Anne Stonex, MACTEC Engineering and Consulting, Inc.	Session 12: DESIGN, Part 2 (Cochise Room 228) Moderator: Jim Hallman, Fugro Consultants
1:30pm	Improved Environmental Factors for Resilient Modulus Carlos Cary, ASU	Hot In-Place Repaving John Rathbun, Cutler Repaving	Integrity Testing of Drilled Pier Foundations John Hayes, FUGRO
2:00pm	Uncertainty Associated with Environmental Models Implemented in the MEPDG Daniel Rosenbalm, ASU	Fiber Reinforced Asphalt Jeff Stempihar, ASU	National Database of Soil Index Properties for Level 1 MEPDG Implementation Claudia Zapata, ASU
2:30pm	ASCE Student Chapter Presentation	Fiber Reinforced Concrete Barzin Mobasher, ASU	Scour of Foundations on Rock Mark Hartig, MACTEC Engineering and Consulting, Inc.
	General Session: Ventana Ballroom 241		Moderator: Jim Delton, ADOT
3:00pm	Highway 93/Hoover Dam Mike Kondelis, ADOT		
4:00pm	End of Day 2: Door Prizes (Ventana Ballroom 241) END OF CONFERENCE		

## Special Needs

ASU is dedicated to making program activities accessible to all persons. If you are a vegetarian or have another special dietary need or a physical limitation that requires certain access needs, please note these on the registration form or contact us before your visit.

## Professional Development Hours (PDHs)

Professional Development Hours (PDHs) are recognized methods of measuring participation in formal, noncredit continuing education programs. Although not a college credit, PDHs provide a quality measurement of continuing education. One PDH is earned for every one hour of class time. Why apply for PDHs? Many professional certifications require members to earn a certain amount per year to maintain certification.

Attendees of the 2010 Pavements/Materials Conference are eligible to receive up to 10.5 Professional Development Hours depending on the number of sessions attended.

## Accommodations/Hotel Reservations

A special ASU rate has been secured at neighboring hotels conveniently located within walking distance of the campus. To make reservations, call the hotel directly and mention that you are attending the ASU Pavements/Materials Conference in order to receive the quoted ASU rate.

**EARLY RESERVATIONS ARE SUGGESTED AS ROOMS ARE BASED ON AVAILABILITY AT TIME OF BOOKING.**

The hotels require a guarantee of all room reservations with a credit card.

### Four Points by Sheraton

1333 Rural Road, Tempe, AZ  
(480) 968-3451

[www.fourpoints.com](http://www.fourpoints.com)

Rate: \$110 per night plus tax

### Courtyard by Marriott

601 S. Ash Avenue, Tempe, AZ  
(800) 627-7468  
(480) 966-2800

[www.marriott.com](http://www.marriott.com)

Rate: \$129 per night plus tax

### Tempe Mission Palms

60 East 5<sup>th</sup> Street, Tempe, AZ  
(800) 547-8705  
(480) 894-1400

[www.missionpalms.com](http://www.missionpalms.com)

Rate: \$160.95 per night plus tax

Additional hotels listed on our website

<http://pavement.engineering.asu.edu>.

## Parking on Campus

A limited number of parking spaces will be reserved in the following parking structures:

- Fulton Center (Foundation Building) located at University and College,
- Rural Road Structure located at Rural and Terrace, and
- Apache Blvd. Structure located at Apache and Normal.

When entering the parking structure, check with the attendant and identify yourself as attending the "Pavement Conference". A sign indicating "Lot Full" does not apply to reserved spots.

The cost of parking is included in your registration fee. Please bring your parking ticket to the registration table when you arrive to obtain a validation stamp. Visit the website <http://pavement.engineering.asu.edu> for parking locations and updated parking details.

## CONFERENCE REGISTRATION FEES

	Early Bird (by Oct. 17/10)	Regular (Starting Oct. 18/10)
<b>Pavements/Materials Conference</b>		
Regular	\$225	\$275
Student	\$25	\$25
Speaker/Moderator	Complimentary	Complimentary

## Both Conferences

### (Pavements/Materials Conference & ISATS)

	Early Bird (by Oct. 17/10)	Regular (Starting Oct. 18/10)
Regular	\$575	\$725
Regular (Developing Countries)	\$475	\$625
Speaker/Moderator (from P/M Conference)	\$375	\$475
Student (Regular)	\$175	\$245
Student (Developing Countries)	\$125	\$195

The registration fee includes speaker presentations, continental breakfast, lunch and refreshment breaks and parking during the conference. Other meals and hotel accommodations are not included. Fees may be paid by check, money order, credit card or by billing to a purchase order. Please make all remittances payable, in U.S. funds, to **Arizona State University**. Payments by VISA or MasterCard are also accepted.

## Refunds and Cancellations

The registration fee is fully refundable up to 20 business days prior to the first day of the program, but no later than October 19, 2010.

## Register by Fax or U.S. Mail

Fax or mail your registration form as soon as possible to reserve your space, even though payment may come later. Don't rely on your buyer or business office to send the form. Putting the form in the mail is only necessary if you will be enclosing a check or money order. A registration confirmation will be faxed or e-mailed to you after receipt of your registration form.

**Mail to: Arizona State University  
Arizona Pavements/Materials Conference**

**Attention: Judy Reedy**  
P. O. Box 875306  
Tempe, AZ 85287-5306

**Phone: (480) 965-1713**

**Fax: (480) 965-0557**

**Website: <http://pavement.engineering.asu.edu>**

## Location

This year's conference is being held at the Memorial Union (MU) on Arizona State University's Tempe Campus in the Ventana Room. The Ventana Room is located on the second floor, room 241. The MU serves as the central meeting and conference center for the ASU community.

**Registration will open at 8:00 a.m. November 16. The conference will begin at 10:00 a.m.**

**Exhibits and Vendor Presentations will be open for your viewing starting at 8:00 a.m. November 16, 2010.**



### Arizona State University

Arizona State University is the largest university in the nation. Located in the Phoenix metropolitan area it is a dynamic urban research university with three campuses and 64,000 students. The **Ira A. Fulton Schools of Engineering** attracts researchers and students from around the world and is the focus of industrial support for technology development and transfer. To meet the ever-changing engineering environment, the Fulton Schools are forecasting and identifying the following as some of the key areas to continue its rise in national prominence:



- Construction Engineering/Management
- Environment
- Solid State Electronics/Materials
- Communications/Information Technology
- Bioengineering and Biotechnology
- Software
- Manufacturing
- Innovation in Education

The School of Sustainable Engineering and the Built Environment (SSEBE) consists of faculty with expertise in a wide range of disciplines from transportation pavements materials to environmental microbiology. Our programs are focused on integrated urban engineering, with an emphasis on arid land issues. We have a highly diverse student population, including students from all over the world.

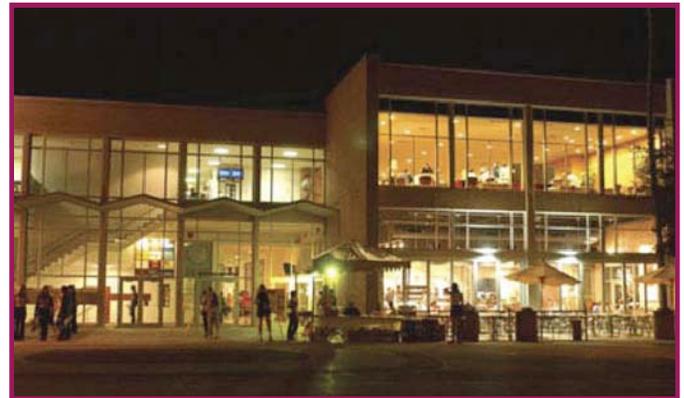
The Del E. Webb School of Construction (DEWSC) is a lively community of scholars, teachers, learners, researchers, industry professionals, and staff working together to achieve greatness. Several factors make the DEWSC unique, including the large metropolitan location, engineering endorsement, industry support, economic environment, good leadership, established tradition, concerned alumni and dedicated faculty. Successful research is also a major factor in DEWSC's leadership position as a nationally recognized program.

The Advanced Pavement Laboratory (APL) at ASU went through a major expansion by the Ira A. Fulton Schools of Engineering in July 1999. The laboratory now is a state-of-the-art facility that provides full capability for characterizing asphalt concrete mixtures, unbound materials, and complete asphalt binder characterization. The APL is located in a new modern lab building on campus (ISTB2 Building). Registrants are encouraged to visit/tour this facility during the conference. The entire testing laboratory is comprised of four main sections; teaching classroom, mixing laboratory, advanced material testing laboratory and binder laboratory.

The EPA-designated National Center of Excellence on SMART Innovations (SMART=Sustainable Materials and Renewable Technologies) focuses on the evaluation of thermal properties of paving and building materials. Fundamental characterization is also coupled with modeling techniques to optimize heat storage capacity, thermal conductivity, and porosity of construction materials. [www.asusmart.com](http://www.asusmart.com)



Advanced Pavement Testing at ASU



Memorial Union at ASU

### Phoenix and Tempe

Phoenix and Tempe are set next to each other in the Salt River Valley, also known as the Valley of the Sun. Nestled among several mountain ranges, the Valley is part of the Sonoran Desert. Points of interest in the Valley include: an Old West town, Indian reservations and gaming casinos, historic sites, Southwestern art museums and shops, many golf courses and professional baseball, football, basketball and hockey.

**ASU** Ira A. Fulton  
Schools of Engineering

ARIZONA STATE UNIVERSITY

Arizona State University vigorously pursues affirmative action and equal opportunities in its employment, activities and programs.

# 6<sup>th</sup> ARIZONA PAVEMENTS/MATERIALS CONFERENCE • TEMPE, ARIZONA • NOVEMBER 16-17

## REGISTRATION FORM:

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Department: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

### Form of Payment

Contact Person: \_\_\_\_\_

Phone: \_\_\_\_\_

Payment request being processed  
(ASU Federal ID # 86-0196696)

Check enclosed payable to ASU

Bill my organization on PO #: \_\_\_\_\_

Copy of PO is provided

Copy of PO to follow

Credit Card:     VISA     MasterCard

(NOTE: For security reasons, do not email credit card information.)

Credit Card Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ Security Code: \_\_\_\_\_

Cardholder's Name: \_\_\_\_\_

Cardholder's Email: \_\_\_\_\_

Please note my dietary or physical requirements:

\_\_\_\_\_

\_\_\_\_\_

## CONFERENCE REGISTRATION:

CHECK APPROPRIATE BOX	Early Bird Registration (by Oct. 17/10)	Regular Registration (starting Oct. 18/10)
<b>Pavements/Materials Conference</b>		
Regular	X \$225	X \$275
Student	X \$25	X \$25
Speaker/Moderator	X Complimentary	X Complimentary

CHECK APPROPRIATE BOX	Early Bird Registration (by Oct. 17/10)	Regular Registration (starting Oct. 18/10)
<b>Both Conferences: Pavements/Materials Conference &amp; ISATS</b>		
Regular	X \$575	X \$725
Regular (Developing Countries)	X \$475	X \$625
Speaker/Moderator (from P/M Conference)	X \$375	X \$475
Student (Regular)	X \$175	X \$245
Student (Developing Countries)	X \$125	X \$195

Please check your organization or affiliation.

- Student
- Consulting Engineer
- Contractor
- Equipment Manufacturer
- Materials Testing Laboratory
- Materials Producer
- Materials Supplier
- Federal Government
- State Government
- County Government
- City Government
- Other

Return to:



ARIZONA STATE UNIVERSITY

School of Sustainable Engineering and the Built Environment  
Pavements/Materials Conference

Attention: Judy Reedy

P.O. Box 875306

Tempe, AZ 85287-5306

Phone: (480) 965-1713

Fax: (480) 965-0557

E-Mail: [judy.reedy@asu.edu](mailto:judy.reedy@asu.edu)

**Potential Exhibitors**

A limited number of exhibit spaces will be available to set up exhibits at the conference. The conference strongly encourages industry and organizations to take advantage of this opportunity to display their engineering capabilities to a wide segment of the pavement community. For more information visit our website at <http://pavement.engineering.asu.edu> or contact Judy Reedy (480) 965-1713 or [judy.reedy@asu.edu](mailto:judy.reedy@asu.edu).

**Arizona Pavements/Materials Conference  
Exhibit Space Application  
November 16-17, 2010**

The undersigned hereby applies for space as an Exhibitor at the Arizona Pavements/Materials Conference. Upon submitting this application, we agree to conform to the exhibit regulations of the Arizona Pavements/Materials Conference. There are a limited number of exhibit spaces available for the conference on a first come/first serve basis. The exhibitor registration of \$699 includes registration to the conference for two people. Additional attendees will be charged a discounted conference fee of \$200 per person.

Company: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Number of booths requested (\$699 each): \_\_\_\_\_

Method of Payment: *This application will only be processed when accompanied by payment in full.*

Amount of payment enclosed \$ \_\_\_\_\_

Check     Money Order    Credit Card:  VISA     MasterCard  
(NOTE: For security reasons, do not email credit card information.)

Credit Card Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ Security Code: \_\_\_\_\_

Cardholder's Name: \_\_\_\_\_

Billing Address: \_\_\_\_\_

Email: \_\_\_\_\_

Description of products/services to be shown: (maximum 40 words)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Description continued)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I have read and agree to conform to the exhibit regulations of the Arizona Pavements/Materials Conference.

Signature \_\_\_\_\_

Date \_\_\_\_\_



2010 Community Service Awards

As an integral part of the Arizona Pavements/Materials Conference, the Conference Planning Committee will be honoring several individuals for community service awards within Arizona. If you know of someone who has made some truly exceptional contributions to the pavements/materials community of Arizona, please do your part and fill out the nomination form today.

Arizona Pavements/Materials Conference Community Service Awards

NOMINATION INFORMATION

As part of the Arizona Pavements/Materials Conference, three individuals who have made significant contributions to the advancement of the pavement / materials technology and programs in Arizona will be recognized and honored with a Pavements/Materials Conference Community Service Award - to be presented during the luncheon on the first day of the conference, November 16.

One award will recognize a person working in the public sector - federal, state (ADOT), local (cities, counties) government agencies. The second award will recognize a person working in the private sector - contractors, consultants, material supplies, equipment suppliers, etc. and the third award will recognize someone in academia.

The basis for an award should be one or more of the following attributes:

- Exceptional contributions to technology enhancement relating to pavements/materials
- Excellence in implementing advanced technology into practice
- Excellence in bridging the gap between research and practice
- Exceptional contributions to the advancement of paving/materials programs in Arizona.

The only restrictions on nominations are (1) recipients of the awards must conduct work in or reside in Arizona, and (2) members of Award Selection Committee are not eligible.

Please use the attached form to submit nominations for a Pavements/Materials Conference Community Service Award. The Awards Selection Committee needs a concise paragraph outlining the basis for the nomination, emphasizing the notable contributions of the nominee to the pavements/materials program and/or industry in Arizona. Also, please make sure of the correct spelling of names, titles and organizations. You can also nominate people through our conference website: <http://pavement.engineering.asu.edu>

Nominations may be submitted either through regular postal mail, faxed or electronically (via E-Mail) to Judy Reedy, Arizona State University, School of Sustainable Engineering and the Built Environment, PO Box 875306, Tempe, AZ 85287-5306, Fax: (480) 965-0557 or [judy.reedy@asu.edu](mailto:judy.reedy@asu.edu).

All nominations must be received by close of business on October 15, 2010. If you have questions regarding the nomination process, please contact: Judy Reedy (480) 965-1713.



Recipients of the 2009 Community Service Award (L to R - James Willson, Consultant, Joe Cano, Bureau of Indian Affairs, Kamil Kaloush, Arizona State University)



ALL NOMINATIONS AND ALL INFORMATION SUBMITTED IN SUPPORT OF NOMINATIONS WILL BE CONFIDENTIAL. Only the award winners will be notified of their nomination.

6th ARIZONA PAVEMENTS/MATERIALS CONFERENCE COMMUNITY SERVICE AWARDS NOMINATION

NOMINEE:

(Full name - please print)

Organization/Agency/Firm:

Position/Title:

Contact Information:

AWARD CATEGORY: (Please indicate category for nominee)

Government/Public  Industry/Private  Academia

AWARD BASIS: (Please provide a concise paragraph describing the basis for your nomination) Attach additional paper if necessary.

SUBMITTED BY:

Name:

Position:

Organization:

Phone Number:

Date Submitted: