

59th Annual Arizona Conference On Roads & Streets

March 31st – April 2nd, 2010
Westin La Paloma Resort
3800 East Sunrise Drive, Tucson, AZ



Registration Information

All seminars and the trade show will be at the
Westin La Paloma Resort, 3800 East Sunrise Drive, Tucson

Roads & Streets \$230 per person registration fee includes:

- Premier Networking Opportunities!!!
- All continuing education seminars with Professional Development Hour (PDH) Certificate Page – *over 40 professional development programs to choose from*
- Trade show admission – *87 vendors to receive up-to-date information & assistance*
- Wednesday Opening Reception – Thursday Continental Breakfast, Lunch, Hors d'oeuvres and Dessert Party – and Friday Continental Breakfast and Lunch.

Please complete and return the conference registration form by Friday, March 20th.

Note: No refund will be given after March 20, 2010.

Late or on-site registration will be available at a cost of \$280 per person.

Sorry, there are no one-day/partial day/or shared registration packages.

Spouse/significant other registration for the conference is \$125
which includes all food functions and special program events.

Children must be accompanied by parent(s) in the Trade Show/food court area.

*Roads & Streets registration **does not** include the Wednesday
Southern Branch APWA Scholarship Golf Outing or the Wednesday
Arizona Department of Water Resources "Floodplain Issues in Transportation Design" course.
Register separately for these two events.*

All Roads & Streets program times and speakers are subject to change.

For program updates, visit the website at: www.acecaz.org

LODGING

The conference block of sleeping rooms at La Paloma is sold out.

The alternative hotel for the conference is the Omni Tucson National Resort, 2727 W. Club Drive, Tucson – Call 1-800/THE-OMNI. Room rate is \$127++ and rooms are limited.

Hotel room cancellations must be made no later than 4:00 p.m. March 24th.

Questions and Answers

The American Council of Engineering Companies of Arizona is responsible for the administration of the Roads & Streets Conference which is hosted by:

**The University of Arizona
Arizona Department of Transportation
Federal Highway Administration**

Contact ACEC of Arizona at 1-800/982-5986 or 602/995-2187; fax 602/995-2218

E-mail: engineers@acecaz.org

Updated conference and trade show information is available on the website:

www.acecaz.org

Conference Committee

**Bob Mickelson, Chairman
Kimley Horn & Associates**

Tim Ahrens, HDR
Nathan Banks, FHWA
Beth Beaubien, Consultant
Bruce Berends, Kleinfelder
John Burton, EEC
Todd Cencimino, Stanley Consultants
Shannon Corgan, Cadsoft
Brian Davis, Stanley Consultants
Maria Deeb, City of Mesa
Christine Fanchi, Dibble Engineering
Al Field, Cardno TBE
Mark Gilliland, AZTEC
Bob Hazlett, MAG
Mike Hulst, EEC
Natalya Hyland, URS Corp.
Al Kattan, Maricopa County
Bruce Kay, Ninyo and Moore
Rob Lyons, JE Fuller
Amanda McGennis, AZ AGC
Mike Marietti, Consultant
Melissa Mayers, Gannett Fleming

Dale Miller, Wilbur Smith
Mark Milstone, AECOM
Stephanie Munoz, Dibble Engineering
Oscar Olliden, Jacobs
Rosa Olivas-Naymik, Ritoch Powell
Leslie Peacock, Entellus
Karen Peters, AMEC
Jim Potter, Stanley Consultants
Dan Pottinger, RBF
Chuck Reynolds, Terracon
Lisa Saylan, Sage Landscape
Jim Schumann, the CK Group
MaryAnn Shobe, Maricopa County
Greg Stanley, Pinal County
Carnell Thurman, Wood Patel
Bob Wagner, Ayres Associates
Linda Walsh, Consultant
Jim Weaver, Alpha Geotechnical
John Willett, Southwest Traffic
Todd Williams, ADOT

Registration Form

59th Annual Roads & Streets Conference

March 31st, April 1st, 2nd, 2010

Return Registration & Payment to:
Roads & Streets 2010
% ACEC of Arizona
1309 East Echo Lane
Phoenix, AZ 85020
Or Fax to 602/995-2218

For further information, call
1-800/982-5986 or 1-602/995-2187
General Questions: engineers@acecaz.org
Billing Questions: accounting@acecaz.org
Website: www.acecaz.org

Note: Save a copy of this form as your receipt.

TYPE OR PRINT CLEARLY

Attendee Name(s) – \$230 per person: _____

Company/Agency _____

Mailing Address _____

City _____ State _____ Zip _____

Business Phone or Cell (_____) _____ Fax (_____) _____

E-Mail _____

Spouse/Significant Other (*must be registered to attend events – \$125 per person*)

Please make check payable to “ACEC of Arizona” ... or Charge \$ _____ to:

__ Visa; __ MasterCard; __ Am. Express: Card No. _____

Exp. Date: _____ Security Code: _____

Cardholder Name: _____

Cardholder Signature: _____

Early Registration is \$230 per person and Spouse/Significant Other is \$125
Early Registration Deadline is Friday, March 20, 2010 ... Late Registration is \$280 per person
Sorry, no refunds issued after March 20, 2010.

Wednesday Events, March 31, 2010

7 a.m. Southern Arizona Branch APWA Scholarship Golf Outing

“Shotgun” start at City of Tucson Randolph Golf Course

(See flyer at www.acecaz.org for sponsorships, details, and separate registration form/fee.)

9 a.m. to 4 p.m. Floodplain Issues in Transportation Design

The Arizona Department of Water Resources State Standards Work Group is presenting this 6-hour course. See flyer at www.acecaz.org for details and registration information.

There is no charge for the course (*does not include lunch*), but you must register in advance.

1 p.m. to 3:30 p.m. University of Arizona Lab Tours

Transportation Lab: Together with the City of Tucson, the ATLAS Center at the UofA has developed a unique laboratory on campus. The laboratory serves as the centerpiece of the Center’s research mission in advanced technologies. The lab is also connected to the City’s “Living Laboratory” of traffic sensors, communications, and control systems in. This tour offers an opportunity to see the ATLAS Center and lab and learn more about the collaborative research with the City of Tucson.

Structures Lab: The Structures Lab currently has multi-agency multi-university (UA, Lehigh U, UCSD) research project led by UofA, called Diaphragm Seismic Design Methodology (DSDM) for precast concrete structure. We will show the 3D dynamic computer simulations finished at UofA and an impressive large-scale shaking table test of a parking structure finished at UCSD for the tour. This study is being used in California to rewrite their building codes.

Hydrology Lab: Dr. Duan was awarded a grant of more than \$400,000 by NSF to study the complex forces that determine how sediment is deposited in river channels. She is currently in the process of building a new flume which will simulate a river basin to assist in the study. We will demonstrate how the flume works and why this study is so important.

For details regarding registration (*there is no cost for the tour, but it is limited to 36 attendees*), where to meet at the UofA, parking, etc. please contact coordinator Melissa Mayers, Gannett Fleming, at 602/553-8817, ext. 250 or mmayers@GFNET.com.

2 p.m. Roads & Streets Conference Registration Desk Opens Arizona Ballroom Foyer

59th Annual Roads & Streets Conference Opening Event – 4 to 5:30 p.m. – Sonoran Room

Introduction by Bob Hollis, Federal Highway Administration



Welcome by
← Tucson Mayor Bob Walkup

Invited Guest US Secretary of
Transportation Ray LaHood →



← Invited Guest
Arizona Governor Jan Brewer

5:30 to 7:30 p.m. Roads & Streets
Opening Reception & Trade Show
Arizona Ballroom

Thursday Morning, April 1, 2010

7:00 to 8:30 a.m. – Arizona Ballroom
Continental Breakfast in Trade Show

8:30 to 9:15 a.m. – Sonoran Room
Opening Conference Guest Speaker
Jim Rounds, Senior Vice President, Elliot D. Pollack & Co.

Jim will provide an economic update including national and local economies
and provide a look at multiple sectors of our economy –

Where We Are – And, Where We Are Headed
Moderator John Hauskins

Thursday, April 1st Sessions 9:30 to 10:20 a.m.

Tucson and Phoenix Transportation Sales Tax Updates

Speakers: Bob Hazlett, P.E., MAG Senior Engineer and Jim DeGrood, P.E., PAG Transportation Service Director

How Arizona's two largest urban areas have responded to the sharp decline in transportation tax revenues. With a \$6 billion deficit in forecasted sales tax revenues, the 20-year Prop. 400 plan in Maricopa Co. needed to be rebalanced. Bob will present the rebalanced plan describing processes, challenges, and the result. Jim has similar challenges with the RTA in Pima Co. Revenues have declined significantly since the voter approved referendum was passed in May 2006. Jim will present the challenges of delivering the 20-year plan in Pima Co. *Moderator Tim Ahrens ... **Finger Rock Room***

Arizona's Megapolitan Future

Speaker: Nancy Welch, Morrison Institute for Public Policy

In May of 2008 the Morrison Institute of Public Policy published a report entitled "Megapolitan – Arizona's Sun Corridor." The Arizona Sun Corridor reaches across six counties from the boarder to nearly Prescott Valley. This report examines the Sun Corridor idea and looks at the impacts on cities and communities, particularly now with the many changes brought by the economic downturn.

*Moderator Mike Hulst **continues with the following "Housing" presentation***

Housing + Transportation Affordability Index

Speaker: Corky Poster, Architect/Planner, UA Distinguished Professor (*Emeritus*), Poster Frost Mirto and Drachman Institute

There is little clarity about the costs associated with a transportation-efficient or transportation-inefficient location of housing. Where single-family homes are more "affordable," costs are lower in part because land is cheaper. However, the transportation costs can be higher and outweigh the savings on housing costs. A measure called the "Housing + Transportation Affordability Index" models the full costs of transportation and combines it with the cost of housing. *Moderator Lisa Saylan ... **Murphey Room***

Arizona County Engineers Report

Speakers: AACE President Tim Stoler, Yavapai County; Ferrin Crosby, Apache County; Benny Young, Cochise County; Dale Wegner, Coconino County; Steve Sanders, Gila County; Michael Bryce, Graham County; Philip Ronnerud, Greenlee County; Mike Speedie, La Paz County; Michael Sabatini, Maricopa County; Nick Hont, Mohave County; Representative from Navajo County; Albert Letzkus, Pima County; Greg Stanley, Pinal County; Scott Altherr, Santa Cruz County; and Roger Patterson, Yuma County

The Arizona Association of County Engineers (AACE) will present an overview of current and upcoming projects in the counties. *Moderator Larry Bruce ... **Astor Room***

Next Generation Concrete Surface (NGCS), Noise & Surface Characteristics Program with Purdue University and White Topping at Rio Verde

Speaker: Larry Scofield, Dir. of Pavement Innovation, American Concrete Pavement Association

In 2005, the concrete industry initiated a 3-year research effort on noise and surface characteristics with Purdue University. Hear an overview of the research project and the current implementation of one of the surfaces that was developed; namely the Next Generation Concrete Surface (NGCS). Five states constructed test sections in 2009 and 4 more are planned for 2010. A survey of the current textures employed within US will be discussed along with a construction project using concrete white topping in Rio Verde, Arizona. *Moderator Jim Weaver ... **Verbena Room***

ARRA Project Development Process

Speakers: Ed Stillings, Bill Vachon, Susan Hall, and Alan Hansen from FHWA; Eric Anderson, MAG; and John Liosatos, PAG

FHWA, MAG and PAG will present and participate in panel discussion on the topic of the ARRA Project Development Process, specifically on how to identify potential projects, defining the special requirements these have when designed and constructed (timelines, reporting, environmental review, etc.) and process needed to follow so these are included in the MAG or PAG TIP. The presentation will conclude with lessons learned and a Q&A panel. *Moderator Maria Angelica Deeb ... **Indigo Room***

Thursday, April 1st Sessions 10:30 to 11:20 a.m.

Vehicle Miles Traveled Fee Basics – The Oregon Pilot Program

Speaker: Jim Whitty, Director, Office of Innovative Partnerships, Oregon Department of Transportation

As technology embraces alternative fueled vehicles and people acquire them, road systems are in jeopardy as the gas tax revenues are slowly drained away. Oregon conceived the Oregon Mileage Fee Concept to look at devising a new system. This included a road User Fee Pilot Program to test the proposed Oregon Mileage Fee Concept. A report in late 2007 effectively proved the concept works and is sound. This program will provide an overview of the Oregon Mileage Fee Concept and the Road User Fee Pilot Program. *Moderator Dale Miller ... **Finger Rock Room** ... Program will be repeated at 4 p.m.*

Livability

Speaker: Shana V. Baker, Community Planner, Federal Highway Administration, Washington, D.C.

The presentation will discuss what livability is and how it relates to transportation. It will also include a discussion on the HUD/DOT/EPA Interagency Partnership for Sustainable Communities and DOT/FHWA Initiatives that support livability. *Moderator Nathan Banks ... **Murphey Room***

County Engineers Report *continues* – **Astor Room**

Porous Asphalt Construction

Speaker: Thomas Clayton, SET, Dir. of Training & Member Services, Colorado Asphalt Pavement Assoc.

This session will present information on the design and construction of Porous Asphalt Pavement. Development of the technology, different construction techniques and experiences from around the nation will be discussed, including specific examples of various projects constructed in Colorado. *Moderator Beth Beaubien ... **Verbena Room***

ARRA Project Development Process ... *continues with the following presentation*
Is There a Better “Request for Qualifications” Process? ... **Indigo Room**

Thursday, April 1st Sessions 11:30 a.m. to 12:20 p.m.

AZ Highway User Revenues – Where Are They Going?

Speaker: John Fink, ADOT

John mixes transportation revenue trends with a comical approach that can leave audiences crying and laughing. He will discuss: Where are gas revenues? Where are they headed? What transportation revenue streams are working and which ones could use some fixing. He will also update us on the HELP loan program. (HELP loans have been assisting AZ communities and ADOT advance transportation projects with a below market cost loan program.)

*Moderator Tim Aherns ... **Finger Rock Room***

Using Sustainability to Build a Better Organization

Speaker: Richard M. Bowen, Assistant to the President, Sustainability, Economic Development, Bio-Medical Initiatives, NAU

NAU has successfully employed sustainable construction, operations, research, and policy for many years to transform its reputation, attract students, create solutions for the citizens of Arizona, and develop a national leadership role. Learn how NAU has used sustainability to dramatically re-engineer the educational process, research, operations of the university, and the physical infrastructure of the campus. Learn the tools and strategies NAU has used to successfully move its award winning and nationally known sustainability work forward. *Moderator Todd Williams ... **Murphey Room***

Phoenix Aviation: An Update

Speaker: David Hensley, Deputy Aviation Director, Design & Construction Services, City of Phoenix Aviation Department

An overview of Phoenix Aviation activities, both design and construction, including Sky Train progress, other projects at Phoenix Sky Harbor, and activities planned for Phoenix Goodyear and Phoenix Deer Valley Airports. *Moderator Al Field ... **Aster Room***

The Future of Submitting Civil Projects to Municipalities

Speakers: Jeff Kramer, P.E., CPM, Dir. of Municipal Services, Arcadis-US representing Town of Gilbert; Roger Rowley, Senior Project Manager, Hunter Contracting; Jeff Hamilton, Pre-Construction Services, Hunter Contracting; and Ron Couillard, CADsoft Consulting

The Town of Gilbert challenged proposing CM@Rs to provide a BIM model to demonstrate the phasing and scheduling impacts. Hunter Contracting, in partnership with CADsoft Consulting, responded with a BIM model that provided these details to the affected agencies. As a result of this effort Gilbert was able to obtain the required approvals to move forward with construction of this vital project. The session will explain the conditions and issues faced, and demonstrate how the BIM solutions resulted in obtaining project approval. *Moderator Shannon Corgan ... **Verbena Room***

Is There a Better “Request for Qualifications” Process?

Speakers: William Fay, Public Works Engineer/CIP, Chandler; Scott Leska, Marana Public Works Department; and invited guest Sue McDermott, Director of Development Services & Engineering, Avondale

Cities will present and participate in a panel discussion on their RFQ process; specifically, on how they create RFP's. Session will provide information on various procurement processes, ideas agencies can possibly consider for their RFP process, provide process guidance to smaller municipalities and Q&A for panel members. If you have a question you want the panel to consider in advance, please email your question to Rosa Olivas at rolivas@ritochpowell.com. The panel will then be prepared to answer all questions of interest. *Moderator Rosa Olivas ... **Indigo Room***

Trade Show Box Lunch
12:20 to 1:30 p.m. – Arizona Ballroom

Thursday, April 1st Sessions 1:30 to 2:30 p.m.

ADOT P3 Program (Public-Private Partnerships)

Speakers: Mary Peters, former US Secretary of Transportation; Gail Lewis, ADOT Assistant Dir., Office of P3 Initiatives; and John McGee, ADOT Executive Dir. for Planning and Policy

Last July Governor Brewer signed into law HB 2396 allowing ADOT to use public-private partnerships to address Arizona's transportation needs. The law grants the ADOT broad authority to partner with the private sector to build or improve Arizona transportation facilities and adds methods to fund the construction/enhancement of roads, transit and other transportation facilities. This session will provide insight into Arizona's P3 program and the guidelines that have been developed for potential public and private partners. *Moderator Tim Ahrens ... **Finger Rock Room***

Clean Energy Initiative and Its Impacts on Transportation and the State

Speakers: Mike Hulst, Engineering and Environmental Consultants, Inc.; Amanda McGennis, Sr. Vice President, AZ Associated General Contractors; and Jerry D. Worsham, Gammage and Burnham

This panel discussion will cover the legal, industry, consulting and contractors side of this bill as it relates to Greenhouse Gas Reduction Programs for Clean Transportation, Transportation efficiency the SmartWay Transportation efficiency program in Arizona. *Moderator Linda Walsh ... **Murphey Room***

SR 202L Design Build Bridge Widenings

Speakers: Randy Simpson, P.E., URS; Russ Stuart, P.E., URS; John Misik, P.E., HDR; and Dan Heller, P.E., TY Lin

The SR 202L Widening Design Build Project included the widening of 22 superstructures at 19 bridge locations. The project included cast-high-and-lower superstructures, a hybrid cast-in-place/precast superstructure, and drilled shaft foundations constructed through existing flood control features. We will focus on the unique bridge design and construction challenges.

*Moderator Oscar Oliden ... **Aster Room***

Challenges of Design & Construction of SR 77 – Lessons Learned Working in a Steep Rock Setting

Speakers: Dave Peterson, SVP, Arizona Operations Manager, AMEC, and Berwyn Wilbrink, Group Transportation Manager, Jacobs

The SR 77 "Christmas" Project, between Globe and Winkelman, started as a simple widening project to address rockfall hazards. During preliminary design, environmental constraints were identified that controlled where the improvements could be made between the Gila River and a historic wall perched above the upper slopes of a 150-ft rock cut. These constraints transformed the design to an asymmetrical, steep side-hill rock excavation job within a very limited space. The team addressed numerous construction challenges. *Moderator Bruce Kay ... **Verbena Room***

Online Cost Proposal Submittal

Speakers: Stanley Soesilo, IT Specialist and Vivien Lattibeaudiere, Ph.D., Director, Engineering Consultants Section, ADOT

The Engineering Consultants Section (ECS) of ADOT will introduce its online system for submitting Cost Proposals for firms who are awarded engineering consultant contracts. Learn how to log on to the system and successfully submit your Cost Proposals online. You will also learn details about other modules of ADOT's Electronic Contract Management System under development that will allow consultants to view information and run reports on their ECS contracts.

*Moderator Al Field ... **Indigo Room***

Thursday, April 1st Sessions 2:45 to 3:45 p.m.

Access Management: How to Educate Elected Officials, Governing Boards & the Public

Speakers: Greg Stanley, Public Works Dir., Pinal County; Brent Billingsley, Dir. of Development Services, City of Maricopa; and Reza Karimvand, Baja Regional Traffic Engineer, ADOT

Implementing Access Management policies in areas of rapid growth can be a difficult hurdle to overcome. We will discuss access management programs in the City of Maricopa, Pinal County and ADOT; with tactics, tips and techniques for dealing with the development community. Members of the public, elected officials and governing boards. *Moderator Christine Fanchi ... **Finger Rock Room***

Utilizing Roadway Ecology Studies for Implementation of Transportation Related Wildlife Connectivity Projects

Speakers: Siobhan Nordhaugen, Arizona Department of Transportation, and Ray Schweinsburg, Arizona Game & Fish Department

ADOT and AGFD are learning how to reduce wildlife vehicle collisions thereby making highways safer and more permeable to wildlife. Together we have successfully developed innovative strategies and offer examples, tools and "lessons learned" to other interested stakeholders.

*Moderator Todd G. Williams ... **continues with the following "Carbon Markets" presentation ...***

Carbon Markets and Opportunities

Speaker: Brendon Cook, Sustainability Director, EcoAid

The Global Carbon Market is growing in North America and presenting many sectors with both challenges and opportunities. This presentation will provide a brief overview of the Carbon Market along with areas for opportunity in the transportation sector. Examples of corporate and public/private initiatives will be highlighted. *Moderator Mike Hulst ... **Murphey Room***

Bridges on the Move – Accelerated Construction Methods for Moving Bridges and Methods to Mitigate Move Related Damage

Speaker: Paul Blackham, Principal Structural Engineer, Stanley Consultants

Two projects will be discussed that involved constructing bridges at a staging area and later moving them into their final location. One project on I-80 (freeway with high traffic demands) used Self-Propelled-Modular Transporters (SPMT's). Second project on SR-66 over Weber River used horizontal skids (or rollers). In contrast to typical SPMT and horizontal skid projects, these two projects were constructed with staged supports located at the pick points, which virtually eliminated cracking associated with picking up the bridge inside the staged support points. *Moderator Jim Potter ... **Aster Room***

Warm-Mix Asphalt Construction Capabilities

Speaker: R. Michael Anderson, The Asphalt Institute

Latest information on Warm-Mix Asphalt Construction Capabilities – a process through which asphalt is produced, placed and compacted at lower temperatures than conventional hot-mix asphalt. Warm-mix asphalt is typically produced at temperatures 50 degrees F to 100 degrees F lower than those used for traditional HMA. Because warm-mix is produced and laid at lower temperatures, the process consumes less energy and generates fewer emissions, cooler weather paving, extended paving season and faster release of pavement traffic. *Moderator Amanda McGennis ... **Verbena Room***

Linking Sustainability and Transportation

Speakers: Shannon Scutari, ADOT, Multimodal Planning Division; Jim Charlier, Charlier & Associates; Kristen Keener-Busby, Sustainability Program Manager, ADOT MPD; and Shannon Scutari, Director of Rail and Sustainability, ADOT MPD

With the goal of sustainability, we will showcase how smart, coordinated transportation and land use choices can translate into sustainable economic policy that optimizes investments and partnerships. Jim Charlier will highlight emerging trends and discuss the value of planning more fuel-efficient, healthy lifestyle-promoting alternatives. Learn the significant efforts underway to develop a sustainable transportation framework and foundation for quality growth. Get insight on where we are headed, what's the plan, and how we leveraging partnerships and resources. *Moderator Dale Miller ... **Indigo Room***

Thursday, April 1st Sessions 4:00 to 5:00 p.m.

Area Service Highway: The Vision of Robert A. Vaughn

Speakers: Paul Patane, ADOT Yuma DE; Charlene Fitzgerald, YMPO Executive Director; Roger Patterson, Yuma County Engineer, Paul Brooberg, Yuma City Engineer

Motorists now have a direct link from Interstate 8 to the boarder at San Luis, Arizona, with the completion of State Route 195. This program is designed to expedite the flow of commercial traffic between the United States and Mexico by channeling large tractor-trailers through the new port. Apart from less congestion, local officials anticipate the new facility to act as a magnet for business and industries to take advantage of NAFTA. Planning for the new 26 miles of SR 195 began in the early 1990's with a total cost of \$92 million to complete. *Moderator Mark Gilliland ... **Finger Rock Room***

Vehicle Miles Traveled Fee Basics – The Oregon Pilot Program

Speaker: Jim Whitty, Director, Office of Innovative Partnerships, Oregon Department of Transportation

As technology embraces alternative fueled vehicles and people acquire them, road systems are in jeopardy as the gas tax revenues are slowly drained away. Oregon conceived the Oregon Mileage Fee Concept to look at devising a new system. This included a road User Fee Pilot Program to test the proposed Oregon Mileage Fee Concept. A report in late 2007 effectively proved the concept works and is sound. This program will provide an overview of the Oregon Mileage Fee Concept and the Road User Fee Pilot Program. *Moderator Dale Miller ... **Murphey Room ... Same program as 10:30 a.m. 4/1/10***

Bridge Under the Wings: Artistic Vision to Structural Decisions

Speaker: Oscar A. Olliden, Structural Group Manager, Jacobs

The unique design of the Isaac Pedestrian Bridge resulted from the close collaboration between Jacobs engineers and the artist. The artist drew her inspiration for the bridge's bird-like shape from the geometric images of parrots painted on prehistoric Native American pottery. For Jacobs, the main goal and challenge was selecting the right superstructure type; properly selecting the structural members which will take the form of the bird; utilizing materials to depict the artist views and to provide safety to the public. *Moderator Jim Potter ... **Aster Room***

Indian Bend Road Improvements – Hayden Road to Scottsdale Road

Speakers: Randall Beck, Trans. Division Manager, URS Corp., and Roger Rowley, Senior Project Manager, Hunter Contracting

The project encompassed the widening and reconstruction of Indian Bend Rd between Hayden Rd and Scottsdale Rd. Improvements consisted of widening from 2 to 4 lanes, construction of a bridge and drop structure to control flows in the Indian Bend Wash, bicycle and pedestrian facilities, and public art. City goals were to improve the capacity of the roadway and major intersections, complete pedestrian linkages in the area, and replace the at-grade crossing of the Indian Bend Wash by constructing a new bridge and drop structure. Learn the challenges & complexities. *Moderator Amanda McGennis ... **Verbena Room***

I-10 Widening in Tucson

Speakers: Greg Gentsch, Prescott District Engineer, ADOT; Rod Lane, Senior Resident Engineer, Tucson District, ADOT; and Mike Bertram, HDR

I-10 between Prince Road and 29th Street in Tucson was completely reconstructed and expanded from six to eight lanes with seven new bridges and underpasses built at Grant Rd., Speedway Blvd., St. Mary's Rd., Congress St., Granada Ave./Cushing St., 18th St. and 22nd St.. The \$210 M project was the largest transportation project to be awarded in southern Arizona and was completed six months ahead of schedule. A 10-minute video about the project will be shown, plus panel members will present information about the project. A Q&A session will follow. *Moderator Priscilla Cornelio ... **Indigo Room***

Trade Show Closes at 4:15 p.m.

**Hors d'oeuvres and Dessert
Prize Drawings
5:30 to 7:00 p.m. Poolside**

Friday Morning, April 2, 2010

**7:30 to 8:30 a.m.
Continental Breakfast in Meeting Foyer Areas**

Friday, April 2nd Sessions 8:30 to 9:30 a.m.

Arizona Rail: Opportunities, Options, and Operations

Speakers: Zoe Richmond, Dir. of Public Affairs, Union Pacific RR; Marc Pearsall, MAG; Shannon L. Scutari, Asst. Dir., State Rail Services; and John McNamara, AECOM, PM-Rail Framework Study

The panel will focus on the types of rail being studied in Arizona including commuter and intercity passenger as well as the current issues associated with freight rail along UP's operating lines. They will cover the commuter rail planning both at the system and the corridor level and the options that will be opened up for urban mobility and interurban connectivity. The potential for future intercity passenger rail connections in Arizona will also be presented. UP will provide an overview of statewide freight rail operations and the specific challenges in Arizona. *Moderator Kammy Horne ... **Finger Rock Room***

ADOT District Engineers Report

Speakers: Floyd Roehrich, State Engineer; Dallas Hammit, Assistant State Engineer; John Harper, Flagstaff DE; Jerry Barnes, Globe DE; Lynn Johnson, Holbrook DE; Michael Kondelis, Kingman DE; Robert Samour, Phoenix Construction; Tim Wolfe, Phoenix Maintenance; Todd Emery, Tucson DE; Greg Gentsch, Prescott DE; Bill Harmon, Safford DE; and Paul Patane, Yuma DE

The ADOT District Engineers will report on their current and upcoming projects. The ADOT State Engineer will begin the session with an update on ADOT's construction program.

*Moderator Maher Salah ... **Murphey Room***

The Phoenix Sky Train – From Ambitious Concept to Grounded Reality

Speakers: Mark Pilwallis, Senior Project Manager, and John Lobo, Structural Engineer, Gannett Fleming

Overview of the project, including the project aims and some of the broad challenges in such a project. The main thrust of the presentation will deal with the logic behind structure types along the alignment and a look at the construction challenges and how the structure was designed to meet those challenges. Will also focus on the signature bridge segment crossing the taxiway and present some of the key features of design and construction of this unique structure. *Moderator Oscar Oliden ... **Aster Room***

Remote Office Construction Kit (ROCK patent pending)

Speaker: Frank Bejarano, Project Manager, Sundt Construction

In 2008 Sundt introduced a new computer technology called the ROCK system which is a tablet PC designed for rugged environments using Adobe Acrobat software to help manage and display project information. This is a better vehicle for viewing documents relating to a project than a standard laptop which isn't really designed for field use. ROCK tablets allow field personnel to easily navigate through the record set and integrate current information – importing all of the latest RFIs into a project, for example – before stepping into the field. *Moderator Amanda McGennis ... **Verbena Room***

Arizona' and Nevada's Interstate 11

Speakers: Bob Hazlett, Senior Engineer, MAG, and Tom Skancke, CANDO Coalition

Although many consider the interstate system complete in the US, there remains a vital connection between the two fastest growing metropolitan areas – Phoenix and Las Vegas. There were two barriers to making this interstate a reality: crossing the Colorado River (which will open in Dec. 2010) and how to bring a route into Phoenix given the constraints in the US-60/Grand Ave. corridor (Hassayampa and Hidden Valley Framework Studies). Efforts are underway in Arizona and Nevada to formalize this connection and develop Interstate 11. ... ***continues with the following "MUTCD" presentation***

What's New in the 2009 MUTCD?

Speaker: Richard C. Moeur, P.E., Traffic Design Manager, Northern Region, NCUTCD Member, ADOT

12/06/09 FHWA published the new Manual on Uniform Traffic Control Devices. This is the national standard for signs, markings, signals, and other devices across the US. This new MUTCD contains thousands of changes impacting agencies and landowners at the national, state, regional, county, local, and neighborhood level, and some new provisions are a dramatic departure from "business as usual." We will discuss the more important changes and how the MUTCD and the future Arizona MUTCD Supplement will affect practitioners and the traveling public. *Moderator Michael Marietti ... **Indigo Room***

Friday, April 2nd Sessions 9:45 to 10:45 a.m.

Design Partnering is Not Dead!

Speakers: Vicki Bever, Senior Project Manager, ADOT Statewide Project Management Group; Berwyn Wilbrink, Project Mgr., Jacobs Engineering; and Susan Detwiler, Project Mgr., Dibble Engineering

Widening almost 10 miles of a two-lane roadway to a four-lane divided highway through a scenic corridor with environmentally sensitive areas were some of the design challenges on US 60 Gonzales Pass. A unique approach to the project was taken through design partnering including visual workshops with 3D rendering and drive-throughs, team building activities, monthly progress meetings near the project site, etc. Partnering carried through during the construction phase and the project was completed 10 months ahead of schedule and \$2.5 million under budget. *Moderator Christine Fanchi ... **Finger Rock Room***

ADOT District Engineers Reports *continues in Murphey Room*

Cheaper, Better, Faster – the Interdisciplinary Design Team (Or, How to Stop Worrying and Love Your Lawyer)

Speaker: Chris Kramer, Attorney and Managing Partner, Miller Kramer, PLLC, Attorneys at Law

The role of lawyers and other right of way and real estate valuation professionals in identifying and addressing potentially costly and time consuming right of way and other legal issues during the design process, before right of way is set in stone and acquisition begins, can and will help a project stay on time and on budget. We will explore real world examples to illustrate how spending a little up front to avoid or address these issues during the design process saves time and money in the long run.

*Moderator Al Field ... **Aster Room***

UV-Cured CIPP – It is not Just for Sanitary Sewer Rehabilitation

Speaker: Dan Broderick, Director of Pipeline Rehabilitation, Achen-Gardner

The Blue-Tek product is ideal for use in rehabilitation of storm drain pipe culverts of all configurations. Developed by Brandenburger in Germany almost 20 years ago, over 15,000,000 LF has been installed in Europe and Asia. This product is a structural resin composite reinforced with spiral-wound continuous glass fibers and is cured with ultra violet light. Discuss the history of this technology, its many flexible applications, items owners should consider when reevaluating this and similar products, and a brief recent case study. *Moderator Kim Carroll ... **Verbena Room***

Transportation Operations

Speakers: Sarath Joshua, MAG ITS Program Manager; Scott Nodes, ADOT; Joel Havris, City of Phoenix; Arizona Corporation Commission

MAG has made many advancements in the areas of real time travel information. ADOT will report on the evaluation and implementation of DMS travel times; the City of Phoenix will report on their wireless radio loop; and the AZ Corporation Commission will give an update of their At-Grade Rail Crossing Study.

*Moderator Beth Beaubien ... **Indigo Room***

Friday, April 2nd Sessions 11:00 to 12 Noon

Growth and Transportation Challenges Facing Native Nations

Speakers: Nathan Pryor, Senior Policy Planner, Maricopa Association of Governments; Misty Dayzie, Tribal Planner/Coordinator, ADOT; Artemio Hoyos, Tribal Planner, Pascua Yaqui Tribe

For tribal communities, meeting the growth challenge has many similarities that most American state and local governments have but politically and administratively they address unique issues and opportunities because of their sovereignty. Overview of American Indian sovereignty and how this affects decision-making for transportation and infrastructure development; a discussion of how the Pascua Yaqui Tribe utilizes federal and regional funding for reservation road projects; and how ADOT integrates tribal consultation and coordination into their processes. *Moderator Jim Schumann ... **Finger Rock Room***

ADOT District Engineers Reports *continues in Murphey Room*

Solar Energy and Roads

Speaker: Stephanie Huang, ADOT, Valley Project Management

The Oregon DOT, Caltrans, and Germany are leaders in the use of solar energy on roads. Use of solar energy is contingent upon the availability of polysilicon and solar panel manufacturer expertise. Possible uses at ADOT include public/private partnerships, buildings, rest areas, interchanges, and road/street lighting. Challenges and considerations for implementation include high capital costs, funding, aesthetics, maintenance costs, environmental mitigation, utility permitting, the one-level constraint, and challenging the status quo. *Moderator Al Field ... **Aster Room***

I-70 Corridor of the Future – 800 Miles of Truck Only Lanes

Speaker: Suzann S. Rhodes, AICP, Wilbur Smith Associates

A coalition of IN, MO, IL, OH DOTs & FHWA joined to evaluate the business case feasibility of creating an 800 mile dedicated *Truck Only Lanes* corridor along I-70. Learn key findings, alternative design & operational scenarios; overview of working with FHWA, multiple states, & public & private stakeholders; managing relationships & consensus building; conducting multi-modal freight commodity, financial & environmental constraints analyses; producing capital operating & maintenance cost estimates & revenue forecasts for a variety of potential tolling regimes. *Moderator Dale Miller ... **Verbena Room***

Sustaining a CIP Program During Challenging Financial Times

Speaker: Dave Meinhart, Transportation Director, City of Scottsdale

Public agencies have been challenged by rapidly escalating costs and failing revenues. This session will review approaches used by the City of Scottsdale's Transportation Department to address both issues. Techniques used include balancing revenue streams across local/regional/federal/private funding sources; providing clear communication with citizens and elected/appointed officials; utilizing both project-specific and programmatic CIP fund accounts; and developing community-supported master plans with detailed implementation policies and strategies. *Moderator Brian Davis ... **Indigo Room***

Friday Lunch, April 2nd
Noon to 1:30 p.m. – Arizona Ballroom

Panel Discussion and Closing Remarks

John Halikowski, Director, Arizona Department of Transportation
John McGee, Executive Director for Planning and Policy, ADOT
John Fink, Manager, Financial Services Group, ADOT

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