

Western Bridge Engineers' Seminar

Sept. 25 - 28, 2011

The Arizona Grand Resort | Phoenix, Arizona

**QUALITY BRIDGE ENGINEERING
SOLUTIONS DURING CURRENT
ECONOMIC CHALLENGES**


800-942-4978

cm.wsu.edu/westernbridge

Seminar managed by:



CONFERENCE MANAGEMENT



Western Bridge Engineers' Seminar

September 25–28, 2011

The Arizona Grand Resort | Phoenix, Arizona

QUALITY BRIDGE ENGINEERING
SOLUTIONS DURING CURRENT
ECONOMIC CHALLENGES

The Western Bridge Engineers' Seminar is a biennial cooperative effort by the Federal Highway Administration and the Transportation Departments of Alaska, Arizona, California, Idaho, Nevada, Oregon and Washington. Its purpose is the exchange of information between government agencies, consultants, contractors, educators, and suppliers on current subjects important to the design, construction, and maintenance of bridges. The theme of the 2011 technical program is "Quality Bridge Engineering Solutions during Current Economic Challenges." An exhibit area will feature booths displaying products and services of interest to seminar participants.

Keynote Speakers

DAVID GOODYEAR, P.E., S.E.

Sr. Vice President / Chief Bridge Engineer, TY Lin



David Goodyear is the chief bridge engineer for the firm of T.Y. Lin International, and was the designer of the Hoover Dam Bypass – Mike O'Callaghan Pat Tillman Memorial Bridge. David has been designing bridges since 1978, beginning his design work for Arvid Grant in Olympia, Washington.

Arvid designed the first major cable-stayed bridge in the U.S.—the Pasco-Kennewick Bridge in Washington, and was educated in Europe as an architect before coming to the U.S. and establishing his bridge design practice in Olympia. While working for Arvid, David was a lead designer for the East Huntington cable-stayed bridge in West Virginia, and represented Arvid Grant as a founding member of the PTI Committee on Cable-Stayed Bridges.

David's design practice includes a number of cable-stayed and arch bridge designs. The two technologies were wed with construction of both the new Hoover Dam Bypass Bridge and David's earlier design of the Crooked River Bridge in Oregon. David is a past president of the Structural Engineers Association of Washington, the current chairman of the PTI Committee on Cable-Stayed Bridges, and recipient of the Beavers Organization's Outstanding Engineering Award for design.

F. DAVE ZANETELL, P.E.

Director of Engineering, CFL, FHWA



Dave is the Project Manager on the \$240 million Hoover Dam Bypass. He has been responsible for the project from initiation through completion. In this role he has been responsible for the projects' design, contracting, and construction management including all six of the various heavy civil projects that encompass the bypass.

In 2007, he was also appointed to collaterally serve as the director of engineering for the Central Federal Lands Highway Division of the FHWA. He provides operational leadership of Central's \$300 million annual program of approximately 50 projects across 14 western states. Mr. Zanetell has provided leadership in transforming CFL into a strong project/construction manager-led organization specifically focusing on CFL's cradle-to-grave, design build, consultant, and construction management delivery processes. Under Dave's leadership, CFL has been recognized by the Project Management Institute as a "Top 25" project management organization world wide. Mr. Zanetell received a BSc in Engineering from the Colorado School of Mines where he is a distinguished alumni, and MSCE in Construction and Engineering Management from the University of Colorado. Mr. Zanetell is a registered Professional Engineer and certified Project Management Professional. Dave has twice been recognized with FHWA's Engineering Excellence Award.

SEMINAR SCHEDULE

Sunday, September 25, 2011

- 3:00 – 6:00 pm REGISTRATION
- 6:00 – 8:00 pm ICEBREAKER (Exhibit Area, Grand Ballroom)

Monday September 26, 2011

- 7:00 am REGISTRATION
- 7:30 am CONTINENTAL BREAKFAST (Exhibit Area)
- 8:30 – 10:00 am GENERAL SESSION
- **Welcome and Opening Remarks**
*Jean A. Nehme, Ph.D., P.E.,
Seminar Chair and Arizona State Bridge Engineer*
 - **Welcome to Arizona**
*John Halikowski, Director,
Arizona Department of Transportation*
 - **Keynote Address**
Cradle to Grave Management of the Hoover Dam Bypass Project
*F. Dave Zanetell, P.E.,
Director of Engineering, Central Federal Lands Highway Division, FHWA*
- 10:00 – 10:30 am COFFEE BREAK (Exhibit Hall, Grand Ballroom)
- 10:30 – Noon TECHNICAL SESSIONS

2A INNOVATIVE DESIGN, CONSTRUCTION & MATERIALS

- **Manette Bridge Replacement—Long Span Parabolic Spliced Girders**
*Anthony D. Messmer, P.E., S.E.,
Washington State DOT, Olympia, WA*
- **Innovations in Bridge Engineering—Chelsea Street Vertical Lift Drawbridge Erection**
*Jerry M. Pfuntner, P.E.,
FINLEY Engineering Group, Inc., Tallahassee, FL*
- **Innovative and Sustainable Bridge Solution Using Recycled Plastic Composites**
*Vijay Chandra, P.E.,
Parsons Brinckerhoff, Herndon, VA*

2B ALTERNATIVE PROJECT DELIVERY METHODS

- **Benefits of CMAR Delivery Method for the Cordes Junction Project**
*Lorena Piedrahita, P.E.,
HDR Engineering, Inc., Phoenix, AZ;
David Benton, P.E.,
Arizona DOT, Phoenix, AZ*
- **Designing Bridges in Alternative Delivery—How to Adjust Your Process**
*Lynn N. Iaquina, P.E., S.E.,
HW Lochner, Inc., Salem, OR*
- **Construction Management at Risk and Bridge Construction—Benefits and Value Added**
*Cade Rowley, P.E.,
Sundt Construction, Tempe, AZ;
Gary Karaboulad, P.E.,
Kimley-Horn and Associates, Inc., Phoenix, AZ*

2C QA/QC IN BRIDGE ENGINEERING

- **El Charcon Pedestrian Bridge—Volunteering for Bridges to Prosperity**
*Thomas R. Cooper, P.E.,
Parsons Brinckerhoff, Denver, CO;
Avery Bang,
Bridges to Prosperity, Inc., Yorktown, VA*
- **Development of Hybrid Control Charts for Active Control and Monitoring of Concrete Strength**
*Barzin Mobasher, Ph.D., P.E., F.ACI,
Arizona State University, Tempe, AZ*
- **Successful Strategies in the QA/QC of Design Plans**
*Michael G. Wright, P.E.,
Arora and Associates, P.C., Lawrenceville, NJ;
Kevin Thompson, P.E.,
Arora and Associates, P.C., Auburn, CA*

SEMINAR SCHEDULE

2D LIGHT RAIL TRANSIT BRIDGES

- **Innovative Design for a Constrained Site—The DART Trinity River Bridge**
William Dooley, P.E.,
Parsons Transportation Group, Richardson, TX
Ben Morris,
Parsons Transportation Group, Richardson, TX
- **Bridge Over Taxiway R, the World's First Transit Crossing of an Active Taxiway**
David A. Burrows, P.E.,
Gannett Fleming, Inc., Phoenix, AZ
- **Streetcar on the Bridge—Old and New Bridges Crossed in the Portland Streetcar Loop Project**
Kelly Burnell, P.E.,
David Evans and Associates, Inc., Salem, OR

Noon – 1:30 pm LUNCH

1:30 – 3:00 pm TECHNICAL SESSIONS

3A SEISMIC DESIGN 1

- **Use of Nonlinear Time History Analysis in Seismic Design of Ordinary Standard Bridges**
Toorak Zokaie, P.E., Ph.D.,
California DOT, Sacramento, CA
- **Innovative Ductile Seismic Shear Keys**
Majid Sarraf, Ph.D., P.E.,
Parsons Transportation Group, Irvine, CA
- **Seismic Design of Bridges For Continued Functionality Using Seismic Isolation**
Roy A. Imbsen, Dr. Engr., P.E.,
Earthquake Protection Systems, Mare Island, Vallejo, CA

3B DESIGN BUILD PROJECTS

- **A Year to Remember—Santan Freeway Design-Build - I-10 and SR101L HOV Ramp Bridges**
Mark A. Chase, P.E.,
AZTEC Engineering, Phoenix, AZ
Olivier F. Mirza, P.E.,
Parsons Brinckerhoff, Tempe, AZ
- **RTD Eagle P3 Bridge Design and Coordination**
Matthew J. Reuer, P.E.,
HDR Engineering, Inc., Denver, CO

- **The Benson Road Bridge Replacement—Maximizing Efficiency and Minimizing Impacts in a Design-Build Environment**
Paul Guenther, P.E., S.E.,
Ben C. Gerwick Inc., Seattle, WA
Hong Guan, Ph.D., P.E.,
CH2M HILL, Bellevue, WA

3C HISTORIC BRIDGE PRESERVATION

- **Rehabilitation of Historic West Monitor Truss Bridge**
Jennifer Reinheld, P.E.,
CH2M HILL, Bellevue, WA
- **Fourth Avenue Underpass—Design and Construction**
Jerry A. Cannon, P.E., S.E.,
TranSystems Corporation, Tucson, AZ
- **Aurora Avenue Bridge Retrofit—Strengthening a Historic Bridge**
Michael Lamont, P.E., S.E.,
TY Lin International, Olympia, WA
Craig Boone, P.E., S.E.,
Washington State DOT, Olympia, WA

3D BRIDGE AESTHETICS

- **Design and Construction of the Self-Anchored Suspension Bridge Across the River Ebro, Spain**
Jiri Strasky, Ph.D., P.E.,
Consulting Engineer, Greenbrae, CA
- **SR179 Oak Creek Bridge, Sedona, AZ—Delivering A Context-Sensitive Solution For A Roundabout Bridge**
Christopher A. Labye, P.E.,
AECOM, Phoenix, AZ
Sergio Oliden, P.E.,
Premier Engineering, Inc., Chandler, AZ
- **Bridge Architecture: Current Trends—Two West Coast Bridge Architect's Perspective**
Michael Fitzpatrick,
TY Lin International, San Francisco, CA
Paul Kinderman, P.E.,
Washington State DOT, Olympia, WA

3:00 – 3:30 pm COFFEE BREAK
(Exhibit Hall, Grand Ballroom)

SEMINAR SCHEDULE

3:30 – 5:00 pm TECHNICAL SESSIONS

4A SEISMIC DESIGN 2

- **Transitioning from AASHTO LRFD Seismic Specifications to the Guide Specifications—Understanding Performance Based Criteria in Force-Based Design**
*Greg Griffin, P.E., S.E.,
Buckland and Taylor Ltd., Seattle, WA*
- **Case Studies of Implementation of the AASHTO LRFD Seismic Bridge Design Guide Specifications in Washington State**
*Bijan Khaleghi, Ph.D., P.E., S.E.,
Washington State DOT, Olympia, WA*
- **Millport Slough Bridge—Coastal Bridge Construction Incorporating Ground Improvement**
*Matthew Stucker, P.E.,
Oregon DOT, Salem, OR*

4B HIGH PERFORMANCE CONCRETE

- **Extending Service Life of Arizona Bridges**
*Tarif M. Jaber, P.E., FACI,
Jaber Engineering Consulting, Inc., Scottsdale, AZ*
- **I-10 Twin Span Bridge Replacement—The Largest HPC Bridge in North America**
*Tony Kojundic, FACI,
Silica Fume Association*
- **Connecting Precast Concrete Bridge Deck Panels with Ultra High Performance Concrete**
*George F. Bornstedt, P.E.,
Oregon DOT, La Grande, OR*

4C EMERGENCY REPAIR AND REHABILITATION

- **I-10 Mescal Road TI UP Emergency Bridge Rehabilitation**
*Navaphan Viboolmate, P.E.,
Arizona DOT, Phoenix, AZ*
- **Vehicular Collision and Truss Bridge Repairs**
*Elmer Marx, P.E.,
Alaska DOT, Juneau, AK*
- **Emergency Repair of the Beebe Bridge Over the Columbia River**
*Glen Scroggins, P.E., S.E.,
Washington State DOT, Tumwater, WA*

4D CONTEXT SENSITIVE SOLUTIONS

- **US 93 Wildlife Overpasses**
*David Benton, P.E.,
Arizona DOT, Phoenix, AZ*
- **Guthrie Bridge Removal**
*Kevin R. Ashby, P.E.,
HDR Engineering, Inc., Phoenix, AZ
Milos P. Vasiljevic, P.E.,
HDR Engineering, Inc., Phoenix, AZ*
- **Benefits of Long-Span Environmentally Sensitive Segmental Bridges—3 Record Spans Built under Budget and Opened to Traffic in 2010**
*Stephen E. Fultz, P.E., S.E.,
FIGG Bridge Engineers, Inc., Denver, CO*

Tuesday, September 27, 2011

7:00 am

REGISTRATION

7:30 am

CONTINENTAL BREAKFAST

8:30 – 10:00 am

TECHNICAL SESSIONS

5A SEISMIC RETROFIT AND REHABILITATION

- **Seismic Retrofit and Rehabilitation of the North Torrey Pines Road Bridge**
*Keith Gazaway, P.E.,
Simon Wong Engineering, San Diego, CA
Nathan S. Johnson, Ph.D., P.E.,
Nevada DOT, Carson City, NV*
- **3D Pushover Analysis and Innovative Seismic Strengthening of North Going Street Bridge**
*Stuart Finney, P.E.,
KPF Consulting Engineers, Portland, OR*
- **In-Span Hinge Replacement and Seismic Retrofit of the Flamingo Viaduct**
*Nathan S. Johnson, Ph.D., P.E.,
Nevada DOT, Carson City, NV
Sami H. Megally, Ph.D., P.E.,
Atkins Global, San Diego, CA*

5B ACCELERATED BRIDGE CONSTRUCTION PROJECTS

- **South Layton Two-Span SPUI Bridge Raised Construction, Lowering and Launching Using Innovative ABC Methods**
*Donath Picardo, P.E.,
Michael Baker Jr., Inc., Midvale, UT*
- **Highways for Life and Accelerated Bridge Construction Projects in Washington State**
*Bijan Khaleghi, Ph.D., P.E., S.E.,
Washington State DOT, Olympia, WA*
- **Sam White Bridge—SPMT Move of 2-Span Continuous Steel Girder Bridge**
*Richard Hansen, P.E., S.E.,
Michael Baker Jr., Inc., Midvale, UT
Bryce Jaynes,
Ralph L. Wadsworth Construction Company, LLC, Draper, UT*

5C GUIDELINES AND SPECIFICATIONS

- **Overview of the FHWA Tunnel Operations, Maintenance, Inspection and Evaluation (TOMIE) Manual**
*Brian J. Leshko, P.E.,
HDR Engineering, Inc., Pittsburgh, PA*
- **A Planning Phase Decision Tool for ABC**
*Toni Doolen, Ph.D.,
Oregon State University, Corvallis, OR
Benjamin Tang,
Oregon DOT, Salem, OR*
- **AASHTO (SCOBS) T-18 Technical Committee Update**
*Barton J. Newton, P.E.,
California DOT, Sacramento, CA*

5D CABLE SUPPORTED BRIDGES

- **Overview and Highlights—Delta Ponds Pedestrian Bridge, Eugene, Oregon**
*Andrew Howe, P.E.,
OBEC Consulting Engineers, Salem, OR
Greg Ausland, P.E.,
OBEC Consulting Engineers, Salem, OR*
- **Seismic Design for the Gerald Desmond Cable-Stay Bridge**
*Patrick W. Pence, P.E.,
HNTB Corp, Santa Ana, CA
Semyon Treyger, P.E., S.E.,
HNTB Corp, Seattle, WA*
- **Erection of the DEH CHO Cable-Stayed Bridge over the Mackenzie River, Northwest Territories, Canada**
*Alan J. Cukurs, P.E.,
Buckland and Taylor Ltd., Seattle, WA*

10:00 – 10:30 am COFFEE BREAK
(Exhibit Hall, Grand Ballroom)

10:30 am – Noon TECHNICAL SESSIONS

6A STEEL BRIDGE DESIGN AND INSPECTION

- **Design Steel Pylon for Curved Cable Stayed Bridge in High Seismic Zone**
*Ling Shang, P.E.,
David Evans and Associates, Inc., Olympia, WA
Tom Whiteman, P.E.,
David Evans and Associates, Inc., Olympia, WA*
- **Inspection and Evaluation of the I-91 Steel Deck Truss Bridges**
*Justin Doornink, Ph.D., P.E.,
TY Lin International, Beaverton, OR
Joseph Krajewski, P.E.,
TY Lin International, Beaverton, OR*
- **Development of Design Standards for Short Span \ Steel Bridges**
*Karl E. Barth, Ph.D.,
West Virginia University, Morgantown, WV*

6B UNFORESEEN CONSTRUCTION CHALLENGES

- **Royal Brougham Way Grade Separation Bridge Design—City of Seattle**
Sammy Tu, P.E., S.E.,
AECOM, Seattle, WA
- **Design and Construction Highlights—Arch Spans, Willamette River Bridge, Eugene, Oregon**
Jim Bollman, P.E.,
OBEC Consulting Engineers, Salem, OR
Larry Fox, P.E.,
OBEC Consulting Engineers, Salem, OR
- **I-580 Freeway Extension Project—Post-Tensioning and Grouting Challenges**
Troy Martin, P.E.,
Nevada DOT, Carson City, NV
Michael Taylor, P.E.,
Nevada DOT, Carson City, NV

6C INSPECTION

- **Inventory Inspection of the Mike O'Callaghan—Pat Tillman Memorial Bridge**
Craig Smart, P.E.,
HDR Engineering, Inc., Las Vegas, NV
David Severns, P.E.,
Nevada DOT, Carson City, NV
- **Underwater Bridge Inspections in the 21st Century—Research Findings on the Usefulness of Acoustic Imaging and GPR**
Daniel G. Stromberg, P.E., S.E.,
Collins Engineers, Inc., Chicago, IL
Terence M. Browne, P.E.,
Collins Engineers, Inc., Chicago, IL
- **Anchor Rod and Bolt Tightening for High Mast Light Towers and Cantilever Sign Structures**
Michael J. Garlich, S.E., P.E.,
Collins Engineers, Inc., Chicago, IL

6D PEDESTRIAN BRIDGES

- **Design and Construction of the Tempe Town Lake Pedestrian Bridge**
Daniel Heller, P.E.,
TY Lin International, Tempe, AZ
Jesse Escamilla III,
TY Lin International, Tempe, AZ
- **Design and Construction of the 63rd Avenue Pedestrian Bridge over the 101L Freeway**
Rob Brantley, P.E., S.E.,
Parsons Transportation Group, Phoenix, AZ
- **Design and Construction of the Gibbs Street Pedestrian Bridge**
Gary F. Conner, P.E., S.E.,
CH2M HILL, Corvallis, OR
Dan Raynor, P.E., S.E.,
CH2M HILL, Corvallis, OR

Noon – 1:30 pm LUNCH

1:30 – 3:00 pm TECHNICAL SESSIONS

7A LRFD GENERAL DESIGN CONSIDERATIONS

- **Finite Element Based LRFD Design of Bottomless Culverts**
Ahilan Selladurai, P.E.,
AECOM, Sacramento, CA
Ahmad M. Abdel-Karim, Ph.D., P.E.,
AECOM, Sacramento, CA
- **ADOT LRFD Bridge Substructure Policies with Emphasis on Interaction Between Structural and Geotechnical Specialists**
Naresh C. Samtani, Ph.D., P.E.,
NCS Consultants, LLC, Tucson, AZ
- **Managing the Option to use Refined Analysis in Bridge Design and Bridge Evaluation**
Susan E. Hida, P.E.,
California DOT, Sacramento, CA

SEMINAR SCHEDULE

7B BRIDGE REPLACEMENT PROJECTS 1

- **The Development of the SR520 Bridge Seismic Design Criteria**
*Greg Nutson, P.E., S.E.,
HDR Engineering, Inc., Seattle, WA*
- **Replacement of the Doyle Drive, The South Access to the Golden Gate Bridge**
*Majid Madani, P.E.,
California DOT, Sacramento, CA*
- **Elwha River Bridge Replacement**
*Charles Spry, P.E., S.E.,
BergerABAM, Federal Way, WA*

7C GUSSET PLATES ANALYSIS AND RATING

- **Development of the Triage Evaluation Procedure for Steel Truss Bridge Joints**
*Charles W. Roeder, Ph.D., P.E.,
University of Washington, Seattle, WA*
- **Lessons Learned from Gusset Plate Rating Analysis**
*Joseph E. Krajewski, P.E., S.E.,
TY Lin International, Beaverton, OR*
- **Application of the Triage Evaluation Procedure for Gusset Plate Load Rating**
*Joseph Merth, P.E., Parametrix, Puyallup, WA
Shane Brown, P.E., Parametrix, Puyallup, WA*

7D FRP COMPOSITE MATERIALS

- **FPR Deck Structural Evaluation for the Morrison Bridge**
*Peter Dusicka, P.E., Ph.D.,
Portland State University, Portland, OR
Holly Winston, P.E.,
Oregon DOT, Salem, OR*
- **SPS Bridge Decks for New Bridges and Rehabilitating Existing Bridges**
*Stephen J. Kennedy, Ph.D., P.E.,
Intelligent Engineering, Ottawa, Ontario, Canada*
- **Fiber Reinforced Polymer Strengthening of Concrete Beams—Navigating the Current Design Specifications and Procedures**
*Robert D. Richardson, P.E.,
HDR Engineering, Inc., Bellevue, WA*

3:00 – 3:30 pm

COFFEE BREAK

(Exhibit Hall, Grand Ballroom)

3:30 – 5:00 pm

TECHNICAL SESSIONS

8A BRIDGE REHABILITATION

- **George Sellar Bridge—Strengthening a Riveted Truss for Added Lane and Sidewalk**
*Geoffrey D. Swett, P.E., S.E.,
Washington State DOT, Olympia, WA*
- **Hazel Avenue Bridge Widening Project**
*Ali Seyedmadani, Ph.D., P.E.,
Parsons Brinckerhoff, Sacramento, CA*
- **Raising Existing In-Service Bridges**
*Stephen Whittington, P.E.,
KPF Consulting Engineers, Portland, OR*

8B BRIDGE REPLACEMENT PROJECTS 2

- **Arizona Eastern Railway Gilson Wash Bridge Replacement**
*Ted W. Buell, P.E.,
HDR Engineering, Inc., Tucson, AZ
Nicholas L. Lafronz, P.E.,
HDR Engineering, Inc., Phoenix, AZ*
- **SR520 Bridge Replacement Program—Test Pile Project Results**
*Paul Bott, P.E., S.E.,
HDR Engineering, Inc., Seattle, WA*
- **The Replacement of the Gila River Bridge—Guthrie, AZ**
*Yuwei Qi, P.E.,
Arizona DOT, Phoenix, AZ*

8C BRIDGE PRESERVATION

- **Bridge Preservation—Maintaining State of Good Repair Using Cost Effective Investment Strategies**
*Anwar S. Ahmad, P.E.,
Federal Highway Administration, Washington, DC*
- **Analysis and Evaluation of Reinforced Concrete Bridges with Flexural Cutoffs at Diagonal Crack Locations**
*Josh Goodall,
HW Lochner, Inc., Salem, OR*
- **Bridge Preservation Tools in Idaho**
*Matt Farrar, P.E.,
Idaho Transportation Department, Boise, ID*

SEMINAR SCHEDULE

8D STEEL BRIDGE INNOVATIONS

- **Proven Practices for Steel Bridge Girder Launching**
*Robert Gale, P.E.,
Buckland and Taylor Ltd., Vancouver, British Columbia, Canada*
- **Oregon's First ASTM A 1010 Steel Plate Girder Bridge**
*Hormoz Seradj, P.E.,
Oregon DOT, Salem, OR*
- **Erecting Steel Bridges—Recent Projects for the Washington State Department of Transportation**
*Nathan Brown, P.E., S.E.,
Washington State DOT, Olympia, WA*

6:00 – 7:00 pm NO HOST COCKTAIL HOUR

7:00 – 9:00 pm BANQUET

Wednesday September 28, 2011

7:30 am CONTINENTAL BREAKFAST

8:30 – 10:00 am TECHNICAL SESSIONS

9A BRIDGE DECKS

- **Polymer Epoxy Overlay on Concrete Bridge Decks**
*Mozaffor Hossain, P.E.,
Arizona DOT, Phoenix, AZ*
- **Construction of a Crack-free Bridge Deck in Washington State**
*Mark Gaines, P.E.,
Washington State DOT, Olympia, WA*
- **ODOT's Experiences with FRP Bridge Decks**
*Steven Lovejoy, Ph.D., P.E.,
Oregon DOT, Salem, OR*

9B MAJOR STRUCTURES

- **Replacing the Alaskan Way Viaduct, Downtown Seattle**
*Anthony Mizumori, P.E.,
Washington State DOT, Olympia, WA*
- **Bridge Design and Construction, Section 5, Palmetto, SR 826/SR 836, Miami, Florida**
*R. Craig Finley Jr., P.E.,
FINLEY Engineering Group, Inc., Tallahassee, FL*

- **Portland Milwaukie Light Rail Cable-Stayed Bridge**
*Michael H. Jones, P.E., S.E.,
HNTB Corp, Santa Ana, CA
Semyon Treyger, P.E., S.E.,
HNTB Corp, Seattle, WA*

9C BRIDGE SCOUR

- **Scour Analysis, Real-Time Monitoring and Field Measurements of Active Scour at a Bridge over the Feather River**
*Kevin Flora, P.E.,
California DOT, Sacramento, CA*
- **Practical Application of ODOT's Plan of Action Database to Assist Maintenance Districts Which Includes an Automated Bridge Alerts System**
*John R. Woodroof, P.E.,
Oregon DOT, Salem, OR*
- **Managing Nevada's Scour Critical Bridges**
*John H. Hunt, P.E.,
Ayres Associates, Inc., Fort Collins, CO
Sajid Sulahria,
Nevada DOT, Carson City, NV*

9D BRIDGE LOAD RATING

- **Load Rating in a Production Environment**
*Ronald A. Love, P.E.,
Bentley Systems, Inc., Downers Grove, IL*
- **Load Rating the NDOT Bridge Inventory**
*Chris Serroels, P.E.,
CH2M HILL, Sacramento, CA*
- **Load Rating for the SR 191 Colorado River Bridge Past and Present**
*Ron Pierce, P.E., S.E.,
David Evans and Associates, Inc., Phoenix, AZ*

10:00 - 10:30 am COFFEE BREAK

10:30 am – Noon GENERAL SESSION

- **Keynote Address**
The New Colorado River Arch Bridge at Hoover Dam
*David Goodyear, P.E., S.E.,
Senior Vice President / Chief Bridge Engineer,
T.Y. Lin International, Olympia, WA*

11:30 am INVITATION TO 2013 SEMINAR

CLOSING REMARKS

ADJOURN

CONFERENCE ATTIRE

Wear casual clothing and comfortable walking shoes for daytime. Bring business casual clothing for the banquet. Plan for warm weather the end of September in Phoenix.

LOCATION

All sessions, meals, breaks and banquet will be held at the Arizona Grand Resort.

8000 South Arizona Grand Parkway
Phoenix, AZ 85044

RESERVATIONS

For reservations call the Arizona Grand Resort:
877-800-4888

Reservations must be made by **September 12, 2011**. When making your reservations, make sure to mention that you are with the Western Bridge Engineers' to receive the reduced conference rate of **\$149** plus tax.

SEMINAR REGISTRATION

The **\$345** registration fee is due **September 2, 2011**. Late registration after **September 2** is **\$390**. Registration fee includes technical program, (3) continental breakfasts, (2) luncheons, refreshments at breaks, Sunday Ice Breaker reception and the Tuesday evening banquet. To register online go to: cm.wsu.edu/westernbridge

To register by mail, please send the completed form to

Washington State University
Conference Management
2606 W Pioneer
Puyallup WA 98371-4998

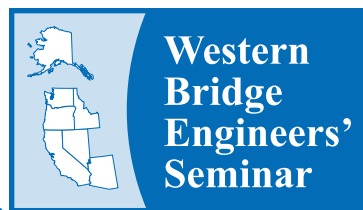
Late registrations may be limited.

A refund of the registration fee minus a **\$50** service charge will be given for cancellation prior to **September 2**. Call Conference Manager, **Janet York** at **253-445-4629** for current registration information.

ADDITIONAL ACTIVITIES

For details on exciting activities occurring before, during and after the Seminar, please log on to www.arizonabtc.org.

#2052



September 25 – 28, 2011
The Arizona Grand Resort
Phoenix, Arizona



REGISTER BY PHONE, FAX OR ONLINE:

[P] 253-445-4629 | [F] 253-445-4633 | Online: cm.wsu.edu/westernbridge

REGISTRATION FORM

Name: _____

Title: _____

Affiliation: _____

Address: _____

City: _____

State/Province: _____ Zip/Postal Code: _____

Phone: _____ Fax: _____

E-mail: _____

Special Needs (*Accessibility, Visual, Hearing, Dietary*): _____

OPTIONS

- Seminar Registration **\$345**
Registration fee includes Monday and Tuesday continental breakfasts and luncheons, Tuesday banquet and Wednesday continental breakfast
- Late Registration Fee [After 9/2] **\$390**
- One Day Registration
 - Monday **\$210**
 - Tuesday **\$210**
 - Wednesday **\$210**
- Extra Banquet Ticket ____ @ \$60 **\$ ____**

TOTAL ALL ITEMS: \$

(Make checks (in US Funds only) payable to Washington State University)

MAIL REGISTRATION FORM TO:

Washington State University, Conference Management
c/o Western Bridge Engineers' Seminar
2606 W Pioneer
Puyallup, WA 98371-4998

TO REGISTER BY VISA OR MASTERCARD: Visa MC

Card Number: _____

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Name on Card: _____

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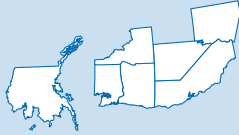
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Western Bridge Engineers' Seminar

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