

This is your invitation to the 2009



# Western Bridge Engineers' Seminar

**September 21–23, 2009**

Sacramento Convention Center | Sacramento, CA

Innovative, Reliable and  
Practical Solutions for Today's  
Bridge Engineer.

Seminar managed by:


**WASHINGTON STATE**  
 **UNIVERSITY**

CONFERENCE MANAGEMENT

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# Western Bridge Engineers' Seminar

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**Innovative, Reliable and Practical Solutions for Today's Bridge Engineer.**

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 subjects of current importance to the design, construction, and maintenance of bridges. The theme of the 2009 technical program is "Innovative, Reliable and Practical Solutions for Today's Bridge Engineer." An exhibit area will feature booths displaying products and services of interest to seminar participants.

## KEYNOTE SPEAKERS



**DAN DORGAN**

**State Bridge Engineer, Minnesota DOT**

Dan Dorgan has over 30 years experience in bridge design and managing statewide bridge programs. He began his career with the Minnesota DOT in 1975 and has held various positions as a bridge designer, administrator for bridge consultant contracts, and manager in the Metropolitan District of Mn/DOT. He has served on various AASHTO and TRB committees and is a member of the AASHTO Subcommittee on Bridges and Structures where he is a member or chair of several technical committees. As State Bridge Engineer, Dan Dorgan was at the forefront following the tragic collapse of the I35W Bridge in responding to media and the legislature, supporting the National Transportation Safety Board investigation, and directing Mn/DOT's actions on a variety of bridge issues to restore and maintain agency operations.



**LINDA FIGG**

**President/CEO and Director of Bridge Art, FIGG**

FIGG is an International firm that exclusively specializes in bridges. FIGG bridges have received 312 awards for customers, recognizing economy, innovation and aesthetics including three Presidential Awards through the National Endowment for the Arts. Linda is a civil engineering graduate of Auburn University and received Auburn's Engineering Achievement Award in 2006. Linda presently serves as the Vice Chair of the board of directors of the Construction Industry Round Table. She was named as one of Engineering News Record's 22 Top Newsmakers in 1998, and Concrete Construction magazine named Linda as one of 13 most influential people in the concrete industry in 2007.



**BRIAN MARONEY DR. ENGR., P.E.**

**California Department of Transportation**

Brian Maroney is a bridge engineer with 25 years of experience and a licensed professional engineer in the State of California. He is currently working for the California Department of Transportation. He has recently been appointed Deputy Program Manager for the Toll Bridge Program from a position of Principal Bridge Engineering and Chief of Toll Bridge Design. Brian Maroney earned his Doctorate from the University of California, Davis under Dr. Karl Romstad conducting research on the seismic response of bridge structures to earthquakes and particularly the behavior of bridge abutments that included the first of their kind large scale bridge abutment tests to failure. Dr. Maroney serves on the faculty at UCD as an adjunct associate professor where he enjoys working on projects that are bridge related.

# Seminar Schedule

## Sunday, September 20, 2009

3:00 – 6:00 pm

**REGISTRATION** (East Lobby)

6:00 – 8:00 pm

**ICEBREAKER** (Exhibit Area)

## Monday September 21, 2009

7:00 am

**REGISTRATION** (East Lobby)

7:30 am

**CONTINENTAL BREAKFAST** (Exhibit Area)

8:30 am – 10:00 am

**GENERAL SESSION** (Exhibit Hall E, Ground Floor)

- **Welcome and Opening Remarks**  
Kevin Thompson, P.E.,  
*Seminar Chair and State Bridge Engineer*
- **Welcome to California**  
Richard Land, Chief Engineer,  
*California Department of Transportation*
- **Keynote Address**

9:00 am

**The New I-35W Bridge Over the Mississippi River:  
A Modern Concrete Bridge for the Future**

Dan Dorgan, State Bridge Engineer,  
*Minnesota Department of Transportation, Oakdale, MN*  
Linda Figg, President/CEO,  
*Figg Engineering Group, Tallahassee, FL*

10:00 am – 10:30 am

**COFFEE BREAK** (Exhibit Area)

10:00 – 10:30 am

**COFFEE BREAK** (Exhibit Area)

10:30 am – 12:00 pm

**TECHNICAL SESSIONS**

### 2A SEGMENTAL CONCRETE BRIDGES OF CALIFORNIA

- **Design and Construction of the Folsom Lake Crossing in Folsom, California**  
Jeffrey Thomure, M.S., P.E., *CH2M Hill, Sacramento, CA*
- **The Precast Segmental Bridge Over the Otay River**  
R. Jon Grafton, *Pomeroy Corporation, Perris, CA*
- **Devil's Slide/Confusion Hill—  
Segmental Construction in Rugged Terrain**  
Kevin Harper, P.E., *California DOT, Sacramento, CA*

### 2B CONCRETE DURABILITY AND SUSTAINABILITY

- **New Development in Design, Detailing and Constructability to Improve the Durability of Concrete Bridges**  
Bijan Khaleghi, Ph.D., P.E., S.E.,  
*Washington State DOT, Olympia, WA*
- **What Does a Sustainable Bridge Look Like?**  
Kelly Burnell, P.E., *David Evans and Associates, Salem, OR*
- **Causes of Concrete Bridge Deck Cracking and Suggested Measures to Eliminate Them**  
Mohammad Sheikhezadeh, P.E.,  
*Washington State DOT, Olympia, WA*

### 2C EARTH RETAINING SYSTEMS

- **Micropile and Rock Anchor Walls**  
Jaime Boris Irahola, M.S., P.E.; Andy McCook, P.E.,  
*California DOT, Irvine, CA*
- **Cantilever Soldier Pile Wall Steel Design: AASHTO LRFD vs. AASHTO 17th Edition**  
Jim Schettler, P.E., S.E., *Jacobs Engineering, Bellevue, WA*
- **Tire Derived Aggregate Backfill for Retaining Walls**  
Dana N. Humphrey, Ph.D., P.E., *University of Maine, Orono, ME*  
James L. Foster, Jr., P.E., *Quincy Engineering, Inc., Sacramento, CA*

# Seminar Schedule

## 2D SEISMIC RETROFIT OF STEEL BRIDGES

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- **Green River Gorge Seismic Retrofit**  
Zhengjie Zhou, Ph.D., P.Eng. *King County DOT, Seattle, WA*
- **Seismic Retrofit of an Historic Steel Arch Bridge: Lessons Learned**  
Barbara S. Moffat, P.E., *Jacobs Engineering, Bellevue WA*
- **Foresthill Bridge Seismic Retrofit Project**  
Mark Reno, P.E., John Quincy, P.E., *Quincy Engineering, Inc., Sacramento, CA*

12:00 – 1:30 pm

### LUNCH

- **Lunch Time Speaker** (To be Determined)

1:30 – 3:00 pm

### TECHNICAL SESSIONS

## 3A RAPID BRIDGE REPLACEMENT

---

- **Rapid Bridge Replacement, Elk Creek Tunnel Bridges**  
Scott N. Nettleton, P.E., *T.Y. Lin International, Salem OR*
- **Build and Slide Bridge Construction Technique**  
Leonard M. Fiji Jr., MSCE, P.E., *California DOT, Eureka, CA*
- **San Francisco-Oakland Bay Bridge: Yerba Buena Island Detour**  
William Casey, P.E., *California DOT, Oakland, CA*

## 3B PRECAST POST-TENSIONED GIRDER APPLICATIONS

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- **Chandler Road Bridge, Prestressed Spliced Girders**  
Douglas Sarkkinen, P.E., S.E., *Principal, Kramer Gehlen & Associates, Inc., Vancouver, WA*
- **Precast Prestressed Spliced Girders: A Practical Solution for Bridge Construction in Difficult Terrain**  
Jose Higareda, P.E., *California DOT, Sacramento, CA*;  
R. Jon Grafton, *Pomeroy Corporation, Perris, CA*
- **Sodom Ditch Bridges—A Variable Depth Precast/Pretensioned/Post-Tensioned Composite Box Beam Provides a Project Schedule Solution**  
Keith Kaufmann, Ph.D., P.E.,  
*Knife River—Western Oregon Division, Harrisburg, OR*

## 3C PROJECT PLANNING

---

- **Management Information Systems in Structural Engineering**  
Joseph E. Krajewski, P.E., *T.Y. Lin International, Beaverton, OR*
- **The SR 520 Bridges—Catastrophic Failure Plan**  
Julie Meredith, P.E., *Washington State DOT, Seattle, WA*;  
Gordon MacDonald, P.E., *Paramatrix, Bremerton, WA*;  
Steve Aisaka, P.E., S.E., *Paramatrix, Bremerton, WA*
- **Columbia River Crossing Type Study and Preliminary Engineering**  
Matt Deml, P.E., S.E., *HDR Engineering, Inc., Vancouver, WA*;  
Chester Werts, P.E., S.E., *HDR Engineering, Inc., Olympia, WA*

## 3D STEEL BRIDGE TOPICS

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- **Mores Creek Canyon Steel Truss Bridge Repair/Retrofit**  
Ted Bush, P.E., S.E., Mike Johnson, P.E. *HDR Engineering, Inc., Boise, ID*
- **Orthotropic Steel Deck Bridge Landmarks of Our Infrastructure in California**  
Alfred R. Mangus, P.E., *California DOT, Sacramento, CA*
- **New Bridge Painting Specifications Incorporating Lessons Learned**  
Jesse Beaver, *Washington State DOT-Bridge Design, WA*;  
DeWayne Wilson, *Washington State DOT-Bridge Construction, Tumwater, WA*

3:00 – 3:30 pm

### COFFEE BREAK

3:30 – 5:00 pm

### TECHNICAL SESSIONS

## 4A CASE STUDIES FROM WASHINGTON STATE

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- **The Design and Construction of Medium Span HPS Hybrid Box Girder Bridges Over I-5 Mainline Traffic**  
Loung (Lou) H. Tran, P.E., *Washington State DOT, Olympia, WA*
- **Bridge and Structures Best Practices and Lessons Learned for a Successful Design/Build Project: I-405 South Bellevue Case Study**  
Stuart Bennion, P.E., S.E., *Washington State DOT, Olympia, WA*;  
Jim Schettler, P.E., S.E., *Jacobs Engineering, Bellevue, WA*;  
Mark Silverman, P.E., *Atkinson Construction, WA*

# Seminar Schedule

- **Design of the 4th Avenue Off-Ramp of the Eastbound South Spokane Street Viaduct in Seattle**

Barbara S. Moffet, P.E., Kent T. Ferguson, P.E., S.E.,  
Kevin T. Dusenberry, P.E., S.E., *Jacobs Engineering, Inc., Seattle, WA*

## 4B MATERIALS TECHNOLOGY

---

- **Reducing the CO2 Of Concrete Mixtures for Bridges**

Tony Kojundic, FACI, *Director, Silica Fume Association, Pittsburg, PA*

- **Proven Chemical Engineering Solutions for the Effective Year-Round Rehabilitation of Bridge Decks**

Tom Carter, *Stirling Lloyd Products, Inc., Newington, CT*

- **Rapid Repair of Low Volume Bridges: Mechanically Fastened FRP Strips**

Michael G. Oliva, Ph.D., *University of Wisconsin*

## 4C UNFORESEEN CONSTRUCTION CHALLENGES

---

- **Gold Mines and CIDH Piles**

Heidi Kuntz, P.E., *California DOT, Rancho Murietta, CA;*  
William Bertucci, *California DOT, Sacramento, CA*

- **Oregon's Realignment of US20 Slides Back into Construction**

Jordan Pelphrey, *Knife River—Western Oregon Division, Harrisburg, OR*

- **Emergency Deck Replacement of the Pit River Bridge Over Lake Shasta**

Sonny Ferreira, P.E., *California DOT, Red Bluff, CA;*  
Andy O'Sullivan, *California DOT, Mount Shasta, CA;*  
Dave Riccitiello, P.E., *William Reames, P.E., Golden State Bridge, Inc., Martinez, CA*

## 4D LRFD SEISMIC DESIGN CONSIDERATIONS

---

- **Laterally Loaded Pile Analysis for the LFRD Design of Bridge Foundations**

Mohammad Islam, Ph.D., P.E., G.E., *California DOT*

- **Design Strategies for Bridges in Low to Moderate Seismic Zones**

Greg Griffin, P.E., S.E., *CH2M Hill, Boise, ID*

- **More Discussion on the AASHTO Guide Specifications for LRFD Seismic Bridge Design**

Elmer Marx, P.E., MSCE, *Alaska DOT, Juneau, AK*

## Tuesday September 22, 2009

7:00 am

**REGISTRATION** (East Lobby)

7:30 am

**CONTINENTAL BREAKFAST** (Exhibit Area)

8:30 – 10:00 am

**TECHNICAL SESSIONS**

### 5A IMPLEMENTATION OF ACCELERATED BRIDGE CONSTRUCTION BY STATE DOTs

---

- **Practice of Accelerated Bridge Construction in California**

Paul Chung, P.E., Michael Beauchamp, P.E.,  
*California DOT, Diamond Bar, CA*

- **Implementing Accelerated Bridge Construction in Oregon**

Benjamin Tang, P.E., Bruce Johnson, P.E.,  
*Oregon DOT, Salem, OR*

- **WSDOT's Plan for Accelerated Bridge Construction**

Jugesh Kapur, P.E., S.E., Bijan Khaleghi, Ph.D., P.E., S.E.,  
*Washington State DOT, Olympia, WA*

### 5B SEISMIC ANALYSIS OF BRIDGE SUBSTRUCTURES

---

- **Study on the Seismic Performance of Bridge Reinforced Concrete Columns Under Combined Actions**

Juan G. Arias-Acosta, David H. Sanders, Ph.D.,  
*University of Nevada, Reno, NV*

- **Probabilistic Damage Control Approach (PDCA) to Seismic Design**

Abbas M. Tourzani, P.E. Sam Ataya P.E.,  
*California DOT, Sacramento, CA*

- **Structural Design and Evaluation of Pile Shafts (State of Caltrans Practice)**

Amir Malek, Ph.D., P.E., Mark Mahan, Ph.D., P.E.,  
*California DOT, Sacramento, CA*

# Seminar Schedule

## 5C CONTEXT SENSITIVE SOLUTIONS FOR PEDESTRIAN BRIDGES

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- **The Lake Hodges Stress Ribbon Bridge**  
Anthony Sanchez, Ph.D., P.E., Joe Tognoli, P.E.,  
*T.Y. Lin International, San Diego, CA*
- **Bridge Under the Wings:  
Artistic Vision to Structural Decisions**  
Oscar A. Oliden, P.E., *Jacobs Engineering, Phoenix, AZ*;  
Michael Negrete, P.M., *City of Phoenix, Phoenix, AZ*
- **Cosumnes River Pedestrian Bridge—  
A 410 Foot, Three Span Wood Truss Bridge**  
James L. Foster, Jr., P.E., *Quincy Engineering, Sacramento, CA*;  
Paul C. Gilham, P.E., S.E. *Western Wood Structures, Inc.,  
Tualatin, OR*

## 5D CASE STUDIES OUTSIDE OF THE WESTERN STATES

---

- **A Case Study in the Use of Advanced Technology in the  
Decision Making Process for Major Bridge Repairs: Lake  
Hamilton, Arkansas, Bridge Foundation Rehabilitation**  
David R. Reser, P.E.,  
*Infrastructure Engineers, Inc., Saint Cloud, FL*
- **Alteration of BNSF Railroad Company Bridge Over the  
Upper Mississippi River, Burlington, Iowa**  
Dr. Kamal Elnahal, P.E.,  
*U.S. Coast Guard, Bridge Administration Office, Washington, DC*
- **Black Bridge Over the Blackfoot River—  
Truss Span Lengthening**  
Brad Miller, P.E., Dustin Hirose, P.E.,  
*HDR Engineering, Inc. Missoula, MT*

10:00 – 10:30 am

**COFFEE BREAK** (Exhibit Area)

10:30 am – 12:00 pm

**TECHNICAL SESSIONS**

## 6A LRFD GENERAL DESIGN CONSIDERATIONS

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- **Live Load Distributions on One and  
Two-Cell Box Girder Bridges**  
Paul Chung, P.E., *California DOT, Diamond Bar, CA*;  
Anthony Logus, P.E., *California DOT, Sacramento, CA*
- **LRFD Fatigue Design of Steel Bridges in California**  
Lian Duan, Ph.D., P.E., *California DOT, Sacramento, CA*
- **Design of Horizontally Curved Concrete  
Box Girder Highway Bridges**  
Richard V. Nutt, S.E., *Nutt, Redfield & Valentine, Orangevale, CA*

## 6B PRECAST GIRDER DESIGN TOPICS

---

- **Composite Behavior of Precast  
Bridge Deck Panel Systems**  
Sean R. Sullivan, Ph.D., *HNTB Corporation, Bellevue, WA*
- **Getting to LRFD Together—Observations Made During  
the Joint TxDOT / WSDOT Development of PGSuper**  
Richard Pickings, P.E., MSCE, *President, BridgeSight  
Software, South Lake Tahoe, CA*;  
Richard Brice, P.E., MSCE, *Washington State DOT, Olympia, WA*
- **Lateral Stability of Long Span Girders from a Producer's  
Perspective**  
Steven Walker, P.E., *Knife River—Western Oregon Division,  
Harrisburg, OR*

## 6C FOUNDATIONS

---

- **Sunken Caisson Foundations for South Park Bascule  
Bridge**  
Yang Jiang, Ph.D., P.E., S.E., *HNTB Corporation, Bellevue, WA*
- **Unknown Foundation Testing and Emergency Repairs for  
the Lake Cushman Bridge**  
Kathryn L. Van Hecke, *USDA Forest Service, WA*;  
Daniel G. Stromberg, *Collins Engineers, Inc., WA*
- **“Solutions for Emergency Bridge Repair”  
(Milltown Dam Removal)**  
John Hinman, P.E., S.E., Gloria Beattie, P.E., *CH2M Hill*

# Seminar Schedule

## 6D A SLEW OF CASE STUDIES FROM SEATTLE

---

- **SR 519 Design/Build Project – Atlantic Street Ramp Design**  
Richard Patterson, P.E., S.E., Michael Bianucci, P.E., *AECOM Technology, Seattle, CA*;  
Huanzi Wang, Ph.D., P.E., *AECOM Technology, Oakland, CA*
- **Innovative Process Informs Function on the SR 520 Bridge Replacement Project**  
Greg Nutson, P.E., S.E., *HDR Engineering, Seattle, WA*
- **SR 519 Intermodal Access Project: Design-Build in an Urban Environment**  
Mark Johnson, MSCE, P.E., *CH2M Hill, Bellevue, WA*

12:00 – 1:30 pm

### LUNCH

- **Lunch Time Speaker** (To be Determined)

1:30 – 3:00 pm

### TECHNICAL SESSIONS

## 7A ACCELERATED BRIDGE CONSTRUCTION PROJECTS

---

- **Successful Project Applications of Accelerated Bridge Construction in California**  
Michael Beauchamp, P.E., Paul Chung, P.E., *California DOT, Diamond Bar, CA*
- **The Public Says Close it and Build it Quickly— Why we Build too Many Projects Under Staged Construction**  
Matthew N. Griggs, P.E., *Dokken Engineering, Folsom, CA*;  
Ron Birch, P.E., *MCM Construction, Sacramento, CA*
- **Performance Specification Contracting for the Mile Bridge**  
Ray Mabey, P.E., *Oregon DOT, Salem, OR*;  
Brian Bierwagen, P.E., *PMP, Paramatrix, Portland, OR*;  
Bob Murray, P.E. S.E., *Paramatrix, Sumner, WA*

## 7B INNOVATIVE PRECAST DESIGN SOLUTIONS

---

- **The Hood Canal Bridge Project**  
Mark A. Gaines, P.E., Geoff D. Swett, P.E., S.E., *Washington DOT, Seattle WA*;  
Michelle L. Tragesser, P.E., *KPFF Consulting Engineers, Seattle, WA*
- **Oregon's Colombia River Gorge Bridges Receive Façade Treatments**  
Keith Kaufman, Ph.D., P.E., *Knife River— Western Oregon Division, Harrisburg, OR*
- **The Significant Advantages of Precast Bridge Rail**  
Jim Morrison, *National Association of Precast Concrete, Pacific Precast, Inc., Vancouver, WA*

## 7C COLD WEATHER CHALLENGES IN BRIDGE CONSTRUCTION

---

- **Design and Construction of Creekside Town Center Bridges**  
Peter A. Giessel, P.E., *Reid Middleton, Inc., Anchorage, AK*
- **Replacement of Alaska Railroad Bridge 432.1 in Goldstream Valley**  
Nathan Dickerson, John Sherk, *HDR Engineering, Inc., Anchorage, AK*
- **Context Sensitive Design of the Fort Edmonton Footbridge Over the North Saskatchewan River**  
Alex Harrison, *CH2M Hill, Sacramento, CA*;  
Joseph Showers, P.E. P.Eng., *CH2M Hill, Denver, CO*

## 7D BRIDGE BEARINGS AND EXPANSION DEVICES

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- **The Selection and Design of High Load Multi-Rotational Bearings for the Hoover Dam Bypass Bridge**  
Ronald J. Watson, *R. J. Watson, Amherst, NY*
- **Homer Hadley Bridge Modular Expansion Joint Replacements**  
Ralph J. Dornsife, P.E., S.E., Richard B. Stoddard, P.E., S.E., *Washington State DOT, Olympia, WA*
- **A Synergy for Increased Seismic Protection of Bridges**  
Roy A. Imbsen, D.Eng., P.E., Anoop Mokha, Ph.D., S.E., *Earthquake Protection Systems, Mare Island, CA*

3:00 – 3:30 pm

**COFFEE BREAK** (Exhibit Area)

# Seminar Schedule

3:30 – 5:00 pm

## TECHNICAL SESSIONS

### 8A INNOVATIVE PRECAST GIRDER SHAPES

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- **Innovative Precast Concrete Solutions from Washington State**  
Richard Brice, P.E., *Washington State DOT, Olympia, WA*
- **Innovative Applications of Spliced Precast Concrete U-Girders to Complex, Longer Span Bridge Projects**  
Gregg A. Reese, P.E., C.E.,  
*Summit Engineering Group, Inc., Littleton, CO*
- **A Super Girder for California Bridges**  
Jay Holombo, Ph.D., P.E., *PBS & J, San Diego, CA*;  
Michael R. Pope, P.E. *California DOT, Sacramento, CA*

### 8B BRIDGE REPAIR AND REHABILITATION

---

- **Rehabilitation of the Fremont Bridge Over the Lake Washington Ship Canal**  
John R. Williams, P.E., *Stafford Bandlow Engineering, Inc., Doylestown, PA*
- **Strengthening and Health Monitoring of Bridge Systems Using Epoxy-Bonded Fiber Reinforced Polymers**  
Kumar K. Ghosh, Ph.D., P.E., *California DOT, Diamond Bar, CA*;  
Hedong Niu, Ph.D., P.E., *California DOT, Sacramento, CA*
- **North Twin Bridge Emergency and Permanent Footing Repairs**  
Anne Fabrello-Streufert, P.E.,  
*KPFF Consulting Engineers, Seattle, WA*

### 8C INNOVATIVE BRIDGE INSPECTION TECHNIQUES

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- **Unique Fracture Critical Rope Access Bridge Inspections Throughout Alaska**  
Brian J. Leshko, P.E., *HDR Engineering, Inc., Pittsburgh, PA*
- **Underwater Bridge Inspection in the Golden State**  
Richard Hunt, P.E., *California DOT, Sacramento, CA*;  
Daniel G. Stromberg, S.E., P.E., *Collins Engineers, Inc., Auburn, CA*
- **In-Depth Inspection of the World's 2nd Longest Steel Tied-Arch Bridge**  
Mark A. Libby, P.E., Thomas D. Howell, P.E.,  
*HDR Engineering, Inc., Portland, OR*

## 8D CASE STUDIES FROM OREGON

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- **Millport Slough Bridge—A Coastal Bridge Design Incorporating Ground Improvement**  
Matthew Stucker, P.E., *Oregon DOT, Salem, OR*
- **Depot Street Bridge Over Oregon's Wild and Scenic Rogue River**  
Ken Stoneman, P.E., PLS, Guido Portier, P.E.,  
*David Evans and Associates, Inc., Salem, OR*
- **Sauvie Island Bridge Replacement**  
Eric S. Rau, P.E., Gernot Komar, P.E., Dipl.Ing., *David Evans and Associates, Salem, OR*,  
Ian B. Cannon, P.E., *Multnomah County, OR*

6:00 – 7:00 pm

**NO HOST COCKTAIL HOUR** (Location TBA)

7:00 – 9:00 pm

**BANQUET** (Business Casual, Location TBA)

## Wednesday, September 23, 2009

7:30 am

**CONTINENTAL BREAKFAST** (Exhibit Area)

8:30 – 10:00 am

## TECHNICAL SESSIONS

### 9A CASE STUDIES FROM CALIFORNIA

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- **A Self Anchored Suspension Bridge Over Harbor Drive in San Diego**  
Daniel Fitzwilliam, P.E., Joe Tognoli P.E.,  
*T.Y. Lin International, San Diego, CA*
- **San Francisco-Oakland Bay Bridge – Connection of the Oakland Touchdown Structure and Skyway at Hinge E**  
Vinh Trinh, *WKE Inc., Santa Ana, CA*,  
Xiaoyun Wu, Ph.D., P.E., *IDC Consulting Engineers, Inc., Anaheim, CA*
- **Tower Bridge Pedestrian / Bicycle Improvements Project—Sacramento, California**  
Benjamin L. Consollacion, P.E., Ali Seyedmadani, Ph.D., P.E.,  
*Parsons Brinkerhoff, Sacramento, CA*



# Seminar Schedule

## **9B MANAGING THE CONDITION OF OUR EXISTING BRIDGES**

- **Element Level Bridge Inspection—Improving the AASHTO Commonly Recognized Structural Elements**  
Barton Newton, P.E., *State Bridge Maintenance Engineer, California DOT, Sacramento, CA*
- **Bridge Instrumentation for the US 101 Spencer Creek Bridge in Oregon**  
Taranat Potisuk, Ph.D., P.E., *H. W. Lochner, Inc., Salem, OR*
- **Advances in Laser Scanning and Sonar Imaging of Bridges”**  
Terence M. Browne, P.E., *Collins Engineers, Inc., Auburn, CA*

## **9C CURRENT DESIGN ISSUES**

- **The Problems With Skew**  
Domenic Coletti, P.E., *HDR Engineering, Inc., Raleigh, NC*;  
Walter Gatti, *Tensor Engineering, Indian Harbour Beach, FL*
- **Simplified AASHTO LRFD Design of Combination Barrier-Deck Overhang in Concrete Bridges**  
Kamal Mirtalaei, Ph.D., P.E., S.E., *Arizona DOT, Phoenix, AZ*
- **Bridge Construction Loads and Evaluation**  
Michael J. Garlich, P.E., S.E.,  
*Collins Engineers, Inc., Chicago, IL*

10:00 am – 10:30 am

**COFFEE BREAK** (Exhibit Area)

10:30 am – 12:00 noon

**GENERAL SESSION**

10:30 am

**THE SAN FRANCISCO-OAKLAND BAY BRIDGE REPLACEMENT PROJECT: WHERE WE ARE TODAY**

Brian Maroney, Dr. Engr., P.E., California Department of Transportation, Oakland, CA

11:30 am

**INVITATION TO 2011 SEMINAR**

**CLOSING REMARKS**

**ADJOURN**

## CONFERENCE ATTIRE

Wear casual clothing and comfortable walking shoes for daytime. Bring business casual clothing for the banquet. Don't forget to bring a light jacket since evenings can be cool.

## LOCATION

Technical sessions, continental breakfasts, luncheons and breaks will be held at the Sacramento Convention Center, 1400 J Street, Sacramento, CA. The banquet will be held across the street at the main conference hotel—the Sheraton Grand Hotel, 1230 J Street—13th and J Street, Sacramento, CA.

## FOR RESERVATIONS:

### Sheraton Grand Sacramento

1230 J Street (13th & J)

Sacramento CA 95814

916-447-1700 | [www.sheraton.com/sacramento](http://www.sheraton.com/sacramento)

When making your room reservations, make sure to mention that you are with the Western Bridge Engineer's seminar to receive the reduced conference rate of **\$135** plus tax.

## SEMINAR REGISTRATION

The **\$345** registration fee is due **September 4, 2009**. Late registration after **September 4** is **\$390**. Registration fee includes technical program, (3) continental breakfasts, (2) luncheons, refreshments at breaks, and the Tuesday evening banquet. To register online go to:

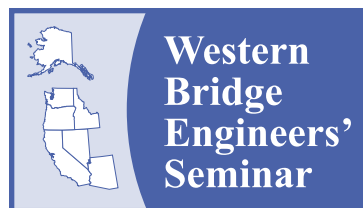
[www.capps.wsu.edu/westernbridge](http://www.capps.wsu.edu/westernbridge)

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 10**. Call Conference Manager, **Janet York** at **253-445-4629** for current registration information.

## GUEST PROGRAM

Come join us for the "Sacramento Discover Gold!" guest program. On Monday morning we will meet at the Sheraton Grand for a Welcome Breakfast followed by a Spirit of Sacramento Delta Cruise and a tour of the California Railroad Museum. On Tuesday, we will travel to the Hangtown Gold Bug Mine in Placerville, returning in time for the evening banquet. Price for the guest program includes all tours and transportation plus breakfast on Monday, lunch on Monday and Tuesday, and the Tuesday evening banquet.

#2578



September 21 – 23, 2009

Sacramento Convention Center  
Sacramento, CA



## Registration Form

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

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

Affiliation: \_\_\_\_\_

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

City: \_\_\_\_\_

State/Province: \_\_\_\_\_ Zip/Postal Code: \_\_\_\_\_

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

E-mail: \_\_\_\_\_

Spouse/Guest Name (For badge): \_\_\_\_\_

Special Needs (Accessibility, Visual, Hearing, Dietary): \_\_\_\_\_

## Options

- Seminar Registration Fee ..... **\$345**  
*(Registration fee includes Monday and Tuesday continental breakfasts and luncheons, Tuesday banquet and Wednesday continental breakfast)*
- Late Registration Fee (After 9/14) ..... **\$390**
- One Day Registration Fee ..... **\$210**
- Spouse/Guest Program Fee ..... **\$175**

**TOTAL ALL ITEMS: \$ \_\_\_\_\_**

*(Make Checks (in U.S. funds) 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

**To Register by Visa or MasterCard:**  Visa  MC

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

Expiration Date: \_\_\_\_\_ CVV Number: \_\_\_\_\_

## Register by Phone, Fax or Online:

Phone: **253-445-4629**

Fax: **253-445-4633**

Online: [www.capps.wsu.edu/westernbridge](http://www.capps.wsu.edu/westernbridge)

WASHINGTON STATE



UNIVERSITY

Conference Management  
2606 W Pioneer  
Puyallup, WA 98371-4998

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**September 21-23, 2009**

Sacramento Convention Center | Sacramento, CA

Innovative, Reliable and Practical Solutions for Today's Bridge Engineer.