September 4–6, 2013
Hyatt Regency Hotel | Bellevue, Washington

ADVANCES IN DESIGN, CONSTRUCTION, INSPECTION & PRESERVATION OF BRIDGES

800-942-4978
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Seminar managed by:

Washington State University
Conference Management
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Washington State Department of Transportation

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BARRY BRECTO
Federal Highway Administration (HBR-WA)
**LINEA LAIRD**

*Chief Engineer, Washington State Department of Transportation*

Linea Laird is the WSDOT Assistant Secretary/Chief Engineer. She previously served as the Program Administrator for the Alaskan Way Viaduct (AWV) Replacement Program. She oversees all aspects of the Program as well as the SR 99 Tunnel Project—including procurement strategies, contract delivery, and coordination and communication with key stakeholders. She is also responsible for developing direction and coordinating policy issues at a project level and interacting on policy issues at a statewide level.

Linea has worked for WSDOT for more than 30 years. Prior to her role on the AWV Program, Linea was the State Construction Engineer, where she was responsible for overseeing the day-to-day operations as well as the strategic direction, leadership, and policy for the WSDOT State Construction Program. Linea served as a co-lead for the work zone safety taskforce and was active at the national level with the Transportation Research Board Committees, the American Association of State Highway and Transportation Officials Subcommittee on Construction, and the National Cooperative Highway Research Program studies.

For eight years, Linea was WSDOT Project Manager for the Tacoma Narrows Bridge Project. As Project Manager, she was responsible for overseeing all aspects of the project. Prior to her time with the Tacoma Narrows Bridge Project, she also served as State Maintenance Engineer and as Olympic Region Program Manager.

**LEE MARSH, PH.D., P.E.**

*Principal and Seismic Specialist, BergerABAM*

Lee Marsh is a principal and seismic specialist for BergerABAM and has worked on virtually all their bridges and elevated guideways since joining the firm in 1994. Lee began his career some 30 years ago working in the nuclear industry performing dynamic analysis of piping systems. He went on to earn a doctorate from the University of Washington (UW) in earthquake engineering and served on the faculty at Washington State University (WSU) before joining BergerABAM. Lee’s practice has included seismic design services for a variety of projects ranging from bridges, transit guideways, marine structures, to buildings and specialized projects, such as cranes for nuclear power plants. However, his primary area of practice and research has been bridges. At both UW and WSU his focus was on large-scale testing of bridge structures,
and since joining BergerABAM, he has blended research with practice and code-development efforts through numerous NCHRP projects, including work on projects to update the AASHTO seismic design provisions, which ultimately culminated in the adoption of the Guide Specifications for LRFD Seismic Bridge Design (seismic guide specifications). Lee has also developed seismic design training, including earthquake engineering courses at both WSU and UW. At BergerABAM, he was the lead developer for two versions of National Highway Institute’s (NHI) courses focusing on seismic design of bridges—one course in the mid-1990s, complete with seven design examples, and the currently available NHI Course 130093, including collaboration on the companion geotechnically focused course. Recently, Lee was the lead author of two NCHRP synthesis reports, one for accelerated bridge construction in high seismic areas (Report 698) and one on performance-based seismic design of bridges (Synthesis 440). These reports take stock of the current state-of-practice and look forward by identifying knowledge gaps that will need to be bridged to move to the next level of practice. Lee assists the AASHTO T-3 Committee in maintaining the seismic provisions in both the LRFD Bridge Design Specifications and the seismic guide specifications. Lee’s project experience ranges from seismic retrofit of roadway bridges intertwined with the terminal building at SeaTac airport, to one of the first spliced-girder bridges in Washington, to criteria development for Seattle DOT’s Phase II bridge retrofit program, to a recently completed Highways for LIFE project to develop and bring to market a precast bent system for high seismic regions.

KEllEy REhm
Program Manager (Bridges and Structures), AASHTO

Kelley C. Rehm, is a licensed Professional Engineer serving as the Program Manager for Bridges and Structures with the non-profit association AASHTO (America Association of State Highway and Transportation Officials). She works nationally with all 50 state Departments of Transportation and their Bridge Divisions to manage updates to codes and specifications that are federally mandated for use in bridge design, construction and inspection. She also helps to promote needed research in the area of bridges and structures. Kelley has over 17 years experience in bridge design, construction and management working both as a private consultant and before that as a design engineer with the Kentucky Transportation Cabinet. Kelley also is a contractor in independent research with NCHRP, and other consultants and Universities. Currently she is a member of the Board of Directors for the non-profit organization Bridging the Gap Africa. This organization builds footbridges for rural communities in East Africa where walking is the main mode of transportation. These footbridges help prevent deaths from drowning and animal attacks as well as connect the communities to marketplaces, schools and healthcare. Kelley is the lead engineer for the organization and the chair of the Technical Advisory Committee. Kelley has a Bachelors Degree in Civil Engineering from the University of Kentucky as well as a Masters Degree in Structures also from the University of Kentucky.
Tuesday, September 3

6:00 – 8:00 pm  ICE BREAKER RECEPTION
GRAND BALLROOM

Wednesday, September 4

7:30 am – 5:00 pm  EXHIBIT HALL OPEN

7:30 – 8:30 am  CONTINENTAL BREAKFAST
GRAND BALLROOM

8:30 – 10:00 am  WELCOME & OPENING REMARKS
EVERGREEN BALLROOM
MODERATOR: Todd Harrison, Washington State Department of Transportation

- Welcome to Washington
  Linea Laird, WSDOT Assistant Secretary/Chief Engineer • Washington State Department of Transportation

- Overview of WSDOT Bridge Program
  Pasco Bakotich III, Development Division Director • Washington State Department of Transportation

- Keynote: Overview of the Alaskan Way Project
  Linea Laird, WSDOT Assistant Secretary/Chief Engineer • Washington State Department of Transportation

10:00 – 10:30 am  COFFEE BREAK/EXHIBITS
SPONSORED BY AYRES ASSOCIATES
GRAND BALLROOM

10:30 – Noon  TECHNICAL SESSIONS

2A  MAJOR BRIDGE DESIGN PROJECTS
GRAND BALLROOM A

MODERATOR: Barton Newton, CalTrans

- Prefabricated Decked Girders for Accelerated Bridge Construction in Washington State
  Scott Sargent • Washington State Department of Transportation
  Bijan Khaleghi • Washington State Department of Transportation

- I-405 Sepulveda Pass Widening Design-Build
  Y. Nein Wang • HNTB Corporation
  Aamir Durrani • HNTB Corporation
  Sherman Lee • Kiewit Infrastructure West Co.

- Replacement of the Sandy River 1-84 Bridges
  Douglas Johnson • David Evans & Associates
2B ACCELERATED BRIDGE CONSTRUCTION

GRAND BALLROOM B

MODERATOR: Ed Miltner, FHWA Idaho

- The Shoo-Fly: Sliding the Sellwood Bridge
  Scott Nettleton • TY Lin
  Anthony Calcagno • TY Lin
  Kenneth Huntley • Multnomah County (OR)

- Skagit River Bridge SRS/712 Collapse and Repair
  Geoff Swett • Washington State Department of Transportation

- Design and Construction of the SR 99 Atlantic Street Bypass
  Nicholas Rodda • Washington State Department of Transportation

2C SEISMIC DESIGN CRITERIA

GRAND BALLROOM C

MODERATOR: Richard Pratt, Alaska Department of Transportation

- Performance Objectives and the AASHTO Guide Specifications for the LRFD Seismic Bridge Design
  Elmer Marx • Alaska Department of Transportation

- Seismic Design Criteria of a Cable-Stayed Bridge: An Owner’s Perspective
  Paul Chung • CalTrans
  Jason J.Q. Fung • CalTrans

- The Importance of Considering Column Top Rotation in the Displacement of a Triple Friction Pendulum Isolators for Tall Column Structures
  Eric Abrahamson • SC Solutions Inc.
  Fletcher Waggoner • SC Solutions, Inc.

2D BRIDGE REHABILITATION

EVERGREEN BALLROOM G–H

MODERATOR: Barry Brecto, FHWA

- Hagwilget Suspension Bridge Refurbishment, Hazelton, BC
  Jeff Mellor • Buckland & Taylor

- Rehabilitation of Long Span Bridges
  Adrian Ciolko • KPFF Consulting Engineers
  Chris Ligozio • KPFF Consulting Engineers

- Bayonne Bridge “Raise the Roadway” Project
  Chester Werts • HDR Engineering Inc.

Noon LUNCH

EVERGREEN BALLROOM A–F

1:30–3:00 pm TECHNICAL SESSIONS

3A MAJOR BRIDGE DESIGN PROJECTS

GRAND BALLROOM A

MODERATOR: Matt Farrar, Idaho Department of Transportation

- Full-depth Precast Concrete Bridge Deck Panels
  William N. Nickas • Precast/Prestressed Concrete Institute

- Bridgelation on the I-4/Selmon Expressway Connector Project
  Morad G Ghali • Atkins Global
  Kenneth C. Saindon • Atkins Global
- The Truss Span of the S. Omaha, Missouri River Bridge
  *Kevin R. Eisenbeis • Burns & McDonnel*

### 3B ACCELERATED BRIDGE CONSTRUCTION  GRAND BALLROOM B

**MODERATOR:** Jean Nehme, Arizona Department of Transportation

- **Time is of the Essence: OR43 Oregon City Bridge Rehab Scheduling**
  *Daniell Pavela • TY Lin*

- **The Use of Accelerated Bridge Construction Techniques in the New Fraser Heights Bridge, Surrey, BC, Canada**
  *Uri Wexler • Associated Engineering*
  *David Harvey • Associated Engineering*
  *Don Kennedy • Associated Engineering*

- **Accelerating Bridge Construction: Recent Applications in California**
  *Paul Chung • CalTrans*
  *J.W. Fang • CalTrans*

### 3C SEISMIC DESIGN  GRAND BALLROOM C

**MODERATOR:** Elmer Marx, Alaska Department of Transportation

- **Design of the SR520 West Approach Bridge Using Seismic Isolation Bearings**
  *Greg Knutson • HDR Engineering Inc.*
  *Paul Bott • HDR Engineering Inc.*

- **As-Built Seismic Analysis of the Golden Gate Bridge Main Suspension Spans**
  *Ted Bush • HDR Engineering Inc.*
  *Kuang Lim • HDR Engineering Inc.*

- **Non-Linear Seismic Behavior of a Highly Horizontally curved Bridge: A Case Study of Yerba Buena Island (YBI) WB On-Ramps, Bay Bridge, San Francisco, CA**
  *Young Deng • Moffat & Nichol*
  *Tom Lee • Moffat & Nichol*
  *Gernot Komar • Moffat & Nichol*
  *Omar Jaradat • Moffat & Nichol*

### 3D BRIDGE REHABILITATION  EVERGREEN BALLROOM G–H

**MODERATOR:** DeWayne Wilson, Washington State Department of Transportation

- **Keene Road Railroad Bridge Conversion for Vehicular and Pedestrian Use**
  *David K. McMullen • KPFF Consulting Engineers*

- **Rehabilitation of the Historic Oregon City Arch OR43: Willamette River Bridge**
  *Eric Bonn • OBEC Consulting Engineers*
  *Jason Kelly • OBEC Consulting Engineers*

- **Emergency Stabilization and Rehabilitation of the Simpson Bridge**
  *Anthony Mizumori • Washington State Department of Transportation*
  *Glen Scroggins • Washington State Department of Transportation*

### Session Schedule

- **3:00 – 3:30 pm**  COFFEE BREAK/EXHIBIT  GRAND BALLROOM

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5
3:30 – 5:00 pm  TECHNICAL SESSIONS

4A  BRIDGE DESIGN CASE STUDY  GRAND BALLROOM A

MODERATOR: Mark Elicegui, Nevada Department of Transportation

- **State of the Practice and Advances in Buried Bridges**
  Joel Hahm • Big R Bridge

- **South Park Bascule Bridge Replacement: Innovations in Design, Construction, & Sustainability Over 80 Years**
  Timothy Lane • HNTB
  David McCurry • HNTB

- **A Constructible Bridge Bent Designed to Re-center After an Earthquake**
  John Stanton • University of Washington
  Marc Eberhard • University of Washington
  Phillip Davis • University of Washington
  Travis Thonstad • University of Washington
  Bryan Kennedy • University of Washington
  Jeffrey Schaefer • University of Washington

4B  BRIDGE DECK CONSTRUCTION  GRAND BALLROOM B

MODERATOR: Lee Marsh, BergerABAM

- **ABCs of Crack-Less Bridge Decks, with Applications in Accelerated Bridge Construction**
  Sonny Fereira • CalTrans

- **How to Specify and Construct Durable Crack Free Bridge Decks: Washington State Experience**
  Mark Gaines • Washington State Department of Transportation
  Mohammad Sheikhizadeh • David Evans & Associates

- **Re-Surfacing the Orthotropic Steel Deck of the Freemont Bridge in Portland, OR**
  John Hinman • CH2M Hill
  Donald Wagner • CH2M Hill
  Charles Seim • CH2M Hill

4C  SEISMIC RETROFIT  GRAND BALLROOM C

MODERATOR: Harvey Coffman, Washington State Department of Transportation

- **Seismic Retrofit Program Priorities & Options for OR**
  Bruce Johnson • Oregon Department of Transportation

- **Seismic Retrofit of Dumbarton Toll Bridge**
  Tariq Masroor • CalTrans
  Steve Mitchell • CalTrans
  Jay Quiogue • CalTrans

- **Operability Retrofits for BART’s North Oakland Aerial Guideways**
  Hassen Beshir • BART
  Matthew Paradis • HNTB Corporation

4D  BRIDGE LOAD RATING  EVERGREEN BALLROOM G–H

MODERATOR: Rich Zeldenrust, Washington State Department of Transportation

- **Improved Load Rating of Existing Bridges for Permit Trucks**
  Vietanh Phung, Tran Tech Engineering
  Kash Nikzad, Tran Tech Engineering
- Load Rating for Two Steel Bridges
  Jingjuan Li • RHC Lochner

- Methods for Improving Load Ratings of Existing Bridges
  Scott Loptson • Morrison Hershfield
  Kent LaRose • Morrison Hershfield
  Ruby Kwan • Morrison Hershfield

5:00–8:00 pm EXHIBITOR RECEPTION & POSTER SESSION

Thursday, September 5

7:30 am – 5:00 pm EXHIBIT HALL OPEN

7:30 – 8:30 am CONTINENTAL BREAKFAST

8:30 – 10:00 am TECHNICAL SESSIONS

5A DESIGN AND CONSTRUCTION OF ARCH BRIDGES

  MODERATOR: William Nickas, Precast Prestressed Concrete Institute

  - Design, Construction and Structural Health Monitoring of a Steel Arch Bridge
    Aleksander Nelson • HDR Engineering Inc.
    Ahmad Abu-Hawash • Iowa Department of Transportation
    Hussein Khalil • HDR Engineering, Inc.
    Brent Phares • Iowa State University
    Terry Wipf, Iowa State University

  - Sellwood Bridge Project: Final Design of the Main Crossing Arch Bridge
    Ian Cannon • Multnomah County (OR)
    Mike Lopez • TY Lin
    Eric Rau • TY Lin

  - Design and Construction of the Bronco Arch Replacement Bridge
    Gregg A. Reese, Summit Engineering Group Inc.

5B BRIDGE PRESERVATION

  MODERATOR: Bruce Johnson, Oregon Department of Transportation

  - Developing an Effective Bridge Preservation Program
    Chris Keegan • Washington State Department of Transportation

  - Precast/Prestressed Concrete Bridge Girders Damaged by Overheight Load Impacts
    Richard Brice • Washington State Department of Transportation

  - How Do You Inspect Something You Can’t See?
    Oregon’s Experience in a Pilot Program to Test PT Ducts
    Marie Kennedy • Oregon Department of Transportation

5C SPECIAL DESIGN AND CONSTRUCTION

  MODERATOR: Steve Seguirant, Concrete Technology Corporation

  - Design of the Truckee River Bridge
    William Rodriguez • TY Lin
Remote Bridges in Alaska
Travis Arndt • Alaska Department of Transportation
Leslie Daugherty • Alaska Department of Transportation

Design of Keechelus Lake Avalanche Bridges
Cory Caywood • Jacobs Engineering
Kevin Dusenberry • Jacobs Engineering

5D LIGHT RAIL BRIDGE PROJECTS
EVERGREEN BALLROOM G–H
MODERATOR: Jugesh Kapur, Burns & McDonnell

Design of the East Link Aerial Guideway Structures in Bellevue, WA
Jerry Dorn • HNTB

PHX Sky Train: Taking Trains Under Planes
David Burrows • Gannett Fleming, Inc.

I-90 Track Bridge: The Reality of Taking Light Rail Vehicles on to the Homer M. Hadley Floating Bridge
Thomas R. Cooper • Parsons Brinckerhoff

10:00–10:30 am COFFEE BREAK/EXHIBIT

10:30–Noon TECHNICAL SESSIONS

6A DESIGN AND CONSTRUCTION OF STEEL BRIDGES
GRAND BALLROOM A
MODERATOR: Amy Leland, Washington State Department of Transportation

Fracture and Fatigue Properties of Seriously Damaged Steel, Bridge Structural Members Repaired through Heat-Straightening
Kaiyuan Liu • Parsons Brinckerhoff
David Mukai • University of Wyoming

Challenges of the Design and Construction of Steel Bridge over Ebey Slough in Washington State
Loung (Lou) H. Tran • Washington Department of Transportation

Design & Construction of the Shenandoah River Bridge Steel Delta Frame
Jason Fuller • HDR Engineering Inc.
Matthew Bunner • HDR Engineering, Inc.

6B BRIDGE MANAGEMENT
GRAND BALLROOM B
MODERATOR: Khashayar Nikzad, Tranteck

Bridge Paving Design, Construction, and Management
Bruce Thill • Washington State Department of Transportation

Improving Load Ratings & Bridge Management Decisions: Field Testing of the Jackson St. Bridge
Brice Carpenter • Bridge Diagnostics Inc.
Greg Kim • Seattle DOT
Brett Commander • Bridge Diagnostics Inc.

WSDOT’s Bridge Management & Performance Measures
DeWayne Wilson • Washington State Department of Transportation
6C BRIDGE RESEARCH  
MODERATOR: Kim Willoughby, BergerABAM
- Seismic Design of Concrete Filled Tube Columns and Their Connections  
  Charles W. Roeder, University of Washington  
  Dawn E. Lehman, University of Washington  
  Max T. Stephens, University of Washington  
  Jiho Moon, Korea University, Seoul South Korea
- Controlling Cracking at the Ends of Pretensioned Concrete Bridge Bulb Tee Girders  
  Pinar Okumus • Worcester Polytechnic Institute  
  Michael G. Olivia • University of Wisconsin
- Socket Connections for Rapid Construction of Bridge Bents with Spread Footings  
  John Stanton • University of Washington  
  Marc Eberhard • University of Washington  
  Olafur Haraldsson • University of Washington

6D BRIDGE AESTHETICS  
MODERATOR: Brian Aldrich, Washington State Department of Transportation
- Genesee Avenue Pedestrian Overcrossing: A Concrete Bridge with High Degree of Curvature  
  Paul Morel • Kleinfelder/Simon Wong Engineering
- Bridge Architecture Current Trends: A West Coast Bridge Architect’s Perspective  
  Michael Fitzpatrick • TY Lin  
  Paul Kinderman • Washington State Department of Transportation
- Aesthetic Bridge Rails and Barriers in California  
  Shannon Post • CalTrans

Noon LUNCH  
1:30 – 3:00 pm TECHNICAL SESSIONS

7A SPECIAL BRIDGE DESIGN & CONSTRUCTION  
MODERATOR: Tim Moore, Washington State Department of Transportation
- Landmark in the Works: Novel Use of Post-Tensioning in Highly Curved Bridges  
  Claudio Osses • AECOM, Buckland & Taylor  
  Huanzi Wang • AECOM, Buckland & Taylor  
  Richard Patterson • AECOM, Buckland & Taylor
- Design of the SR 99 Bored Tunnel and Approach Structures in Seattle, WA  
  Jerry Dorn • HNTB Corp
- Accelerated Design/Construction Using Prefabricated Bridge Components  
  Merv Ericksson • DJ & A
7B BRIDGE PRESERVATION

MODERATOR: Kelly Rehm, AASHTO

- **Summary of Critical Findings Reviews for the National Bridge Inspection Program**
  Brian J. Leshko • HDR Engineering Inc.

- **Field Application of Ultrasonic Phased Array for Structural Evaluation**
  Curtis Schroeder • Fish & Associates Inc.

- **Rope Access Investigation and Emergency Repair of the Diefenbaker Bridge Girder Fracture**
  Reed Ellis • Stantec Consulting Services, Inc.
  Nicholas Cioffredi • Stantec Consulting Services, Inc.
  Frank Block IV • Stantec Consulting Services, Inc.

7C BRIDGE DESIGN CASE STUDY

MODERATOR: Jeff Carpenter, Washington State Department of Transportation

- **Design and Construction of Fresno SR 180 Braided Ramp Design Build Project**
  Sammy Tu • ARUP
  John Pologar • Walsh Group

- **Precast Girder and Integral Bent Cap for the Sunset Blvd and Skirball Center Drive Crossing Bridges**
  Patrick W. Pence • HNTB Corp
  Evelyn Y. Liang • HNTB Corp.
  Luan S. Go • HNTB Corp.
  Kookjoon Ahn • CalTrans

- **Structural Design Complexity of Presidio Parkway CIP/PS Solid Slab Bridges**
  Ali Rejaie • HNTB Corp.
  Kuan Go • HNTB Corp.
  Evelyn Liang • HNTB Corp.

7D BRIDGE REHABILITATION

MODERATOR: John Olk, Washington State Department of Transportation

- **Seismic Retrofit and Rehabilitation of the Laurel Street Overcrossing**
  Peter Smith • TY Lin

- **US-2 Moyie River Gorge Bridge Rehabilitation**
  Dan Gorley • Idaho Department of Transportation
  Kenneth Clausen • Idaho Department of Transportation

- **Reconstruction of the New Jersey Turnpike Authority’s Easterly Hackensack River Bridge**
  Richard Schaefer • HNTB Corp.
  Andrew Kamilaris • Dewberry Engineers
  Kevin M. Healy • NJ Turnpike Authority

3:00–3:30pm COFFEE BREAK/EXHIBIT
3:30 – 5:00 pm  TECHNICAL SESSIONS

8A  BRIDGE DESIGN POLICIES  GRAND BALLROOM A
MODERATOR: Craig Boone, Washington State Department of Transportation

- Evaluation of Common Design Policies for Precast Prestressed I-Girder Bridges
  Richard Brice • Washington State Department of Transportation
  Stephen J. Seguirant • Concrete Technology Corp.
  Bijan Khaleghi • Washington State Department of Transportation

- Stability of Straight Steel Plate Girders During Construction
  Robert C. Gale • Buckland & Taylor

- Analysis Of Curved And Skewed Steel Girder Bridges During Construction
  Andres Sanchez • HDR Engineering Inc.
  Brandon Chavel • HDR Engineering Inc.
  Cagri Ozgur • Rizzo Associates
  Donald White • Georgia Institute of Technology
  Domenic Coletti • HDR Engineering Inc.

8B  GEOTECHNICAL DESIGN  GRAND BALLROOM B
MODERATOR: Monique Pawelka, Washington State Department of Transportation

- Geotechnical Challenges of the S. Holgate Street to King Street Viaduct Replacement Project, Seattle, WA
  Monique Anderson • Shannon & Wilson
  Jim Struthers • Washington State Department of Transportation

- Wishkah Bridge Replacement-Designing for Significant Landslide Movement with Conventional Materials
  Anne Fabrello-Streufert • KPFF Consulting Engineers
  Aaron Olson • KPFF Consulting Engineers
  Jason Pang • KPFF Consulting Engineers

- Shaft Base Grouting-Perching Deep Foundations in Specific Soil Layers
  Stuart Bennion • BergerABAM

8C  BRIDGE DESIGN CASE STUDY  GRAND BALLROOM C
MODERATOR: Mo Sheikhzadeh, David Evans Associates

- The Two Medicine River Bridge: Montana’s First Post-tensioned Concrete Box-Girder Bridge, Glacier, MT
  Tony Kojundic • Elkem Materials, Inc.

- The 1st Thermoplastic Bridges in U.S. Highways (5)
  Vijay Chandra • Parsons Brinckerhoff
  John S. Kim • Parsons Brinckerhoff

- Southbound US-191 Cold Creek Canyon Bridge
  Chayan Bhattacharyya • Arizona Department of Transportation
  Mike Morrison • Arizona Department of Transportation
8D PREFABRICATED BRIDGE ELEMENTS AND SYSTEMS

MODERATOR: Chuck Prussack, Central Premix

- Prefabricated Bridge Elements and Systems in Idaho
  Dan Gorley • Idaho Department of Transportation
  Kenneth Clausen • Idaho Department of Transportation

- Construction Difficulties in Rural Arizona
  Amjad Alzubi • Arizona Department of Transportation

- Recommended AASHTO LRFD Design Specifications and Method of Structural Analysis for Bridge Structures with Resilient Energy Dissipation Mechanism in Their Columns
  M. “Saiid” Saiidi • Professor of Civil & Environmental Engineering, University of Nevada-Reno
  Brian Nakasoji • University of Nevada
  Jedediah Bingle • Washington State Department of Transportation

5:00–9:00 pm  EXHIBITOR MOVE-OUT

Friday, September 6

7:30–8:30 am  CONTINENTAL BREAKFAST  EVERGREEN FOYER

8:30–10:00 am  TECHNICAL SESSIONS

9A CABLE SUPPORTED BRIDGES  EVERGREEN BALLROOM A

MODERATOR: Randy Cox, American Segmental Bridge Institute

- Tower Erection Engineering for the San Francisco-Oakland Bay Bridge Self-anchored Suspension Span
  B. Hammersley • Klohn Crippen Berger Ltd.
  W. Wu • Wu and Dowedell Associated
  B. Hammersley • Wu and Dowedell Associated
  D. Dowedell • Wu and Dowedell Associated
  N. Greco • American Bridge Company

- Fabrication of the Deh Cho Bridge Pylons
  Paul King • Rapid-Span Structures, Ltd.

- Innovative Methods for Inspection of Cable-Stayed Highway Bridges, Old and New
  Scott Wyatt • KPFF Consulting Engineers
  Chris Ligozio • KPFF Consulting Engineers

9B BRIDGE PROJECTS  EVERGREEN BALLROOM B

MODERATOR: Vijay Chandra, Parsons Brinckerhoff

- D to M Streets Track and Signal Improvement Project: Pacific Avenue Bridge
  Thomas R. Wilson • Parsons Brinckerhoff
  Erick Kelly • Parson Brinckerhoff

- Gusset Plate Triage Analysis for Steel Trusses in Washington
  Patrick Gallagher • Washington State Department of Transportation
- History of Accelerated Bridge Construction
  M. Lee Marsh • BergerABAM
  James S. Guarre • BergerABAM
  Robert F. Mast • BergerABAM
  Greg A. Banks • BergerABAM

**9C BRIDGE DESIGN CASE STUDY**

**EVERGREEN BALLROOM C**

**MODERATOR:** Kevin Thompson, URS

- **Washington Street Overcrossing-Accelerated Bridge Construction Methods: Concept to Completion**
  Andy Howe • OBEC Consulting Engineers
  Jason Kelly • OBEC Consulting Engineers

- **Glenwood Connector Pedestrian Bicycle Bridge: Minimizing Environmental Impacts Through Sustainable Materials and Minimal Project Footprint**
  Evan Sinn • TY Lin
  Scott Nettleton • TY Lin

- **Ship & Barge Collisions with Highway Bridges**
  Michael Knott • Moffat & Nichol
  Eric Nichol • Moffat & Nichol
  Mikele Winters • Moffat & Nichol

**9D BRIDGE INSTRUMENTATION**

**EVERGREEN BALLROOM G–H**

**MODERATOR:** Debbie Lehmann, FHWA Washington

- **Force Monitoring of Post-Tensioning Tendons and Cable Stays in Bridge Structures**
  Shahid Islam • DYWIDAG-Systems International

- **Instrumentation and Structural Health Monitoring of the Galena Creek Bridge**
  Troy Martin • Nevada Department of Transportation

- **Images at Depth-The Use of Acoustic Imaging on Large River Crossings: A Case Study**
  Jeffrey B. Rowe • Infrastructure Engineers Inc.
  Kenneth LaBry • CH Fenstermaker & Associates, LLC

**10:00–10:30 am **

**COFFEE BREAK**

**EVERGREEN FOYER**

**10:30–11:45 am **

**GENERAL SESSION**

**EVERGREEN BALLROOM E–F**

**MODERATOR:** Bijan Khaleghi, Washington State Department of Transportation

- **Keynote: Whence and Whither Seismic Design? Past and Future Perspectives on Bridge Seismic Design**
  Lee Marsh • BergerABAM

- **Keynote: Bridging the Gap Africa**
  Kelly Rehm • AASHTO Program Manager (Bridges and Structures)

**11:45 am**

**INVITATION TO 2015 CONFERENCE**

**EVERGREEN BALLROOM E–F**

- **Closing Remarks & Skagit River Bridge Showcase Program Announcement**
  Bijan Khaleghi • Washington State Department of Transportation

- **Adjourn**

13
1 Accelerated Bridge Construction for Busy Commuter Rail Service: Jerrold Avenue Bridge Replacement
Matthew Paradis • HNTB Corp.

2 The Amelia Earhart Network Tied Arch Bridge
Frank Blakemore, Natalie McCombs • HNTB Corp.
Mark Hurt • Kansas DOT

3 Machinery Rehabilitation for the Hylebos Waterway Bridge East 11th Street over the Hylebos Creek Waterway, Tacoma, Washington
John R. Williams • Stafford Bandlow Engineering Inc

4 Bridging from Land to Light
Tammy C. Heffron • Darin Freeman, HDR

5 Structural Design for Widening Bridge at Sepulveda Boulevard Undercrossing
Ali Rejaie • HNTB Corp

6 A Case Study-Straddle and Single Column Bents Effect on Box Girder
Sammy Tu • Priscilla Mensah, ARUP

7 Bridge Widening Seismic Retrofit Requirements-A Parametric Study
Kash Nikzad, Vietanh Phung • Tran Tech Engineering LLC

8 Bridge Widening Using Different Superstructure and Substructure System
Genmiao Chen • Parsons Brinckerhoff
Greg Knutson • HDR Inc

9 Rehabilitating History using Modern Design-Build Delivery
Matthew J. Lengyel • David Evans & Associates

10 Open-Deck Bridge Surgery: Breathing New Life into Vital Bridges Without Traffic Closures or Detours
Murray Johnson • Buckland & Taylor Ltd

11 Oregon Department of Transportation Phase 2 Seismic Retrofit Program
Albert Nako • Oregon DOT
Jeff Olson • Quincy Engineering Inc

12 Dynamic Analysis of a Base-Isolated Bridge, Seattle, WA
Jeremy Butkovich, Bill Perkins • Shannon & Wilson
Paul Bott • HDR Inc
Greg Nutson, James Struthers • WSDOT

13 The Lead Rubber Bearings as a Form of Rehabilitation on an Existing Bridge
Robert Coomes • CH2M Hill
14 Chehalis River Bridge-Steel Truss Bridge Seismic Retrofit
   Kevin Kim • Jacobs Engineering

15 Seismic Design of a Bridge with Geofoam Embankment
   J. Logan Julander • Michael Baker Jr. Inc

16 Highway 99 Shoulder Bus Lane at BNR Overhead: Complex Fast-Tracked Bridge Widening and Seismic Retrofit to Provide Streamlined and Sustainable Commuter Option
   Henry Leung, Jan Kocaba, Jianping Jiang, Caroline Ngan • MMM Group

17 Bridge Coating in Japan: The Quest for the 100 Year Coating
   Winn Darden • LUMINFLON Fluoropolymer Resins

18 Riveted Truss Bridge Gusset Plate Retrofit and Analysis
   Richard Schaefer, HNTB
   Brian Buckman, Jean Laird • New Jersey Turnpike Authority

19 The Missouri River Bridge at Rulo, Nebraska
   Kevin R. Eisenbeis • Burns & McDonnell

20 Design and Inspection of Long Span Suspension Bridges-Bridge Information Modeling
   Vanja Samec, Johann Stampler, Harald Sorsky, Lee Tanase, Jeremy Shaffer • Bentley Systems Inc

21 Welded Wire Reinforcement Utilized as Shear Reinforcement in Concrete Bridge Girders and Utilized as Reinforcement in Structures
   Todd R. Hawkinson • Wire Reinforcement Institute

22 Wood Solutions for Creative and Sustainable Bridge Design and Construction
   Jerry Parks • Western Wood Preservers Institute

23 Benefits of Bridge Information Modeling
   Jeff Kroon • Bentley Systems Inc
100 Eriksson Technologies, Inc.
103 TRC Engineers, Inc.
105 SSL, LLC
106 Hilman Rollers
107 Utelite Structural Lightweight Aggregates
108 B&B Roadway
109 Scougal Rubber Corporation
111 Bridge Diagnostics, Inc. (BDI)
112 Vector Corrosion Technologies
113 ACROW Corporation
114 Fyfe Company/Contech Services
115 BridgeSight Inc.
116 Jacking Solutions, LLC
117 LARSA, Inc.
202 Viathor, Inc.
203 Silica Fume Association
204 Euclid Chemical Company
205 LUSAS
206 Transpo Industries, Inc.
207 Sealite USA
208 American Segmental Bridge Institute
209 Watson Bowman Acme Corp.
210 Contech Engineered Solutions
211 Epoxy Interest Group of CRSI
213 Foundation Technologies, Inc.
214 Schrader Co. Sales, LLC.
215 Aslan FRP / Hughes Brothers
216 The Reinforced Earth Company
217 Wheeler
302 The D.S. Brown Company
303 Davis Wire Corp
304 BGFMA
305 U.S. Bridge
306 Campbell Scientific
308 Big R Bridge
309 Collins Engineers, Inc.
311 Concrete Reinforcing Steel Institute
312 Western Coating
313 SPX Hydraulic Technologies
314 KamaticsRWG
315 Dow POLY-CARB
316 Loadtest USA
317 Galvanizers Company
402 Case Foundation Company
404 R.J. Watson, Inc.
406 Hilfiker Retaining Walls
408 Skyline Steel
410 National Steel Bridge Alliance
412 Kwik Bond Polymers
414 Precast/Prestressed Concrete Institute
416 DYWIDAG Systems International (DSI)
510 Phoscrete Corporation
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