



**2015
NATIONAL
ACCELERATED
BRIDGE
CONSTRUCTION
CONFERENCE**

CONFERENCE AT A GLANCE

SUBJECT AREAS

- G-1:** STATE ABC EXPERIENCES
- G-2:** ABC PROJECTS WITH GRS-IBC
- G-3:** EVALUATION AND MONITORING OF ABC BRIDGE MOVES
- G-4:** LATERAL SLIDE CASE STUDIES
- G-5:** ABC SUBSTRUCTURES SOLUTIONS
- G-6:** RE-USE OF EXISTING SUBSTRUCTURES FOR ABC PROJECTS
- G-7:** ADVANCING SEISMIC RESEARCH FOR ABC
- G-8:** ABC PROJECTS USING SPMT
- G-9:** ABC CONSTRUCTION SOLUTIONS
- G-10:** PBES CONNECTION DETAILS AND MATERIALS
- G-11:** ABC RESEARCH
- G-12:** ADVANCEMENT OF PREFABRICATED BRIDGE ELEMENTS
- G-13:** ABC CASE STUDIES
- G-14:** ABC BRIDGE DECK CASE STUDIES
- G-15:** ABC APPLICATION FOR RETROFIT
- G-16:** DESIGN OF ABC PROJECTS FOR SERVICE LIFE
- G-17:** PROMOTING ABC
- G-18:** ADVANCED MATERIALS FOR ABC
- G-19:** MISCELLANEOUS
- G-20:** SHRP2 R04 RELATED PROJECTS

MONDAY DECEMBER 7

8:00 AM – 10:00 AM	GENERAL SESSION				
10:00 AM TO 10:30 AM COFFEE BREAK AT EXHIBIT HALL					
ROOM	JAMES L. KNIGHT CENTER	ORCHID	JASMINE	HIBISCUS A	HIBISCUS B
10:30 AM –Noon	G-1 STATE ABC EXPERIENCES	G-4 LATERAL SLIDE CASE STUDIES	G-6 RE-USE OF EXISTING SUBSTRUCTURES FOR ABC PROJECTS	G-11 ABC RESEARCH	G-9 ABC CONSTRUCTION SOLUTIONS
12:00 PM TO 1:00 PM LUNCH BREAK- EXHIBIT HALL- CASH BUFFET					
1:00 PM – 3:00 PM	G-3 EVALUATION AND MONITORING OF ABC BRIDGE MOVES	G-4 LATERAL SLIDE CASE STUDIES	G-10 PBES CONNECTION DETAILS AND MATERIALS	G-11 ABC RESEARCH	G-18 ADVANCED MATERIALS FOR ABC
3:00 PM TO 3:30 PM COFFEE BREAK- EXHIBIT HALL					
3:30 PM – 5:30 PM	G-1 STATE ABC EXPERIENCES	G-14 ABC BRIDGE DECK CASE STUDIES	G-1 5 ABC APPLICATION FOR RETROFIT	G-11 ABC RESEARCH	G-20 SHRP2 R04 RELATED PROJECTS

TUESDAY DECEMBER 8

ROOM	JAMES L. KNIGHT CENTER	ORCHID	JASMINE	HIBISCUS A	HIBISCUS B
8:00 AM – 10:00 AM	G-1 STATE ABC EXPERIENCE	G-7 ADVANCING SEISMIC RESEARCH FOR AB	G-13 ABC CASE STUDIES	G-17 PROMOTING ABC	G-19 MISCELLANEOUS
10:00 AM TO 10:30 AM COFFEE BREAK- EXHIBIT HALL					
10:30 AM – NOON	G-2 ABC PROJECTS WITH GRS-IBC	G-8 ABC PROJECTS USING SPMT	G-13 ABC CASE STUDIES	G-11 ABC RESEARCH	G-19 MISCELLANEOUS
12:00 PM TO 1:30 PM LUNCH BREAK- EXHIBIT HALL- CASH BUFFET					
1:30 PM – 4:00 PM	G-1 STATE ABC EXPERIENCES	G-7 ADVANCING SEISMIC RESEARCH FOR ABC	G-5 ABC SUBSTRUCTURES SOLUTIONS	G-16 DESIGN OF ABC PROJECTS FOR SERVICE LIFE	G-12 ADVANCEMENT OF PREFABRICATED BRIDGE ELEMENTS

CONFERENCE PRESENTATIONS AT A GLANCE

CONFERENCE PRESENTATIONS- MONDAY DECEMBER 7 (MORNING 8:00 AM – 12:00 PM)					
GENERAL SESSION					
WELCOME Atorod Azizinamini, Director ABC-UTC and Mark Rosenberg, President of FIU <i>Moderator, Mal Kerley, NXL Construction Services, Inc.</i>					
Caesar Singh, Director, University Grants Program, OST - Office of the Assistant Secretary for Research and Technology, U.S. Department of Transportation					
Gus Pego, District Secretary, Florida Dept. of Transportation					
Keynote Speakers - Congressman Mario Diaz-Balart FHWA Administrator, Gregory Nadeau					
RECOGNIZING TRAVEL SCHOLARSHIP CONTRIBUTORS, Ed Power, HDR and Carlos Duarte, CDR Maguire					
RECOGNIZING BEST ABC PROJECT WINNERS AND ABC PERSON OF THE YEAR, Carmen Swanwick, Chair, AASHTO SCOB T-4					
COFFEE BREAK – EXHIBIT HALL					
10:00 AM – 10:30 AM	JAMES L. KNIGHT CENTER	ORCHID	JASMINE	HIBISCUS A	HIBISCUS B
	G-1: STATE ABC EXPERIENCES I	G-4: LATERAL SLIDE CASE STUDIES I	G-6: RE-USE OF EXISTING SUBSTRUCTURES FOR ABC PROJECTS	G-11: ABC RESEARCH I	G-9: ABC CONSTRUCTION SOLUTIONS
10:30 AM – 11:00 AM	Hartford Vermont Bridge Replacement - SIBC and CMGC Project Delivery <i>Kristin Higgins, Vermont Agency of Transportation</i>	THE LARDO BRIDGE SLIDE <i>Brian Byrne, Lochner</i>	Foundation Characterization and Reuse in ABC Projects <i>Frank Jalinos, FHWA</i>	Slide-in bridge construction cost estimation tool <i>Zac Taylor, Michael Baker International</i>	Mechanized ABC of Large-Scale Projects <i>Marco Rosignoli, Dragados USA</i>
11:00 AM – 11:30 AM	Fort goff creek bridge fish passage. <i>Dorie Mellon, CALTRANS</i>	M-100 Superstructure Slide in the City of Pottersville, Michigan <i>Daniel Broekhuizen, AECOM</i>	Load Rating of Bridge Foundations <i>Anil Agrawal, The City College of New York</i>	Precast bridges subjected to very important horizontal loads <i>Luis Javier Sanz, Imagina-Ttandol SAS</i>	Is that Bridge Open Yet? ABC lessons from a Contractor's perspective <i>Michael Zicko, HCB, Inc.</i>
11:30 AM – 12:00 PM	The Value of ABC: A Rural DOT Perspective- <i>Jennifer Fitch, Vermont Agency of Transportation</i>	Lateral Slide of Historic Bridge in Washington State <i>Kevin Dusenberry, Jacobs</i>	Assesment, Risk Management And Rehabilitation Of Existing Structural Foundations <i>Jerry DiMaggio, Applied Research Associates</i>	Effect of the interface moisture content on the bond performance between a concrete substrate and a non-shrink cement-based grout <i>Igor De la Varga, SES Group</i>	Innovative Construction Methods to Replace the division Street Bridge over the North Branch Canal in Chicago, Illinois <i>Eugene Sobocki, Scott Patterson, Acrow Bridges</i>
12:00 PM – 1:00 PM	LUNCH BREAK- EXHIBIT HALL- CASH BUFFET				

CONFERENCE PRESENTATIONS AT A GLANCE

CONFERENCE PRESENTATIONS- MONDAY DECEMBER 7 (AFTERNOON 1:00PM – 5:30 PM)					
ROOM	JAMES L. KNIGHT CENTER	ORCHID	JASMINE	HIBISCUS A	HIBISCUS B
1:00 PM – 1:30 PM	G-3: EVALUATION AND MONITORING OF ABC BRIDGE MOVES Superstructure monitoring during SPMT movement <i>Ryan Drefus, Geocomp Corporation</i>	G-4: LATERAL SLIDE CASE STUDIES II Highway 406 Glendale Avenue Overpasses Rehabilitation: Lateral Slide Rapid Bridge Replacement <i>David Cerullo, MIMM Group Limited</i>	G-10: PBES CONNECTION DETAILS AND MATERIALS Evaluation and Design of Resilient Concrete Filled Tube Column-to-Precast Cap Beam Connections <i>Max Stephens, University of Washington</i>	G-11: ABC RESEARCH II SHRP2 ABC Details Lead to a Successful Bridge Replacement in Maine <i>Tom Kendrick, McFarland Johnson, Inc.</i>	G-18: ADVANCED MATERIALS FOR ABC Understanding the applications and Advantages of Calcium Sulfo-Aluminate (CSA) Cement Technology in Accelerated Bridge Construction <i>Chris Davis, CTS Cement Mfg. Corp / Rapid Set Products</i>
1:30 PM – 2:00 PM	Friction Values for Slide-In Bridge Construction <i>Kristopher Johnson, Utah State University</i>	Going the Distance: The Lateral Sliding of Four Railway Bridges at West Toronto Diamond in Toronto. <i>Brent Archibald, Parsons</i>	Rapid Bridge Deck Joint Repair and Rehabilitation <i>James Nelson, Iowa DOT</i>	Development of prediction model for ultimate flexural and shear capacities of jointed precast deck panels in bulb-tee girder system <i>Imad Eldin Khalafalla, Ryerson Univ.</i>	Recent Changes in AASHTO LRFD Specifications Regarding Lightweight Concrete <i>Gary Greene, Trine University</i>
2:00 PM – 2:30 PM	Structural Response Monitoring to Assess Bridge Condition During Construction <i>Chris Kavars, SENSRL LLC</i>	Larpeur avenue bridge <i>Logan Julander, Michael Baker International</i>	Precast Substructures for ABC – Case Studies in Design & Construction <i>Alan Phipps, Figg Bridge Engineers</i>	Data Base of all available ABC projects and research information <i>David Garber, FIU</i>	Lightweight Aggregate as Geotechnical Fill for ABC Projects <i>Reid Castradale, Castradale Engineering Consultants, PC</i>
2:30 PM – 3:00 PM	Bridge Pier Movement and Forces during Slide-In <i>Upul Attanayake, Western Michigan University</i>	Development of Systematic ABC Program: Consultant's perspective <i>Noopur Jain, AECOM</i>	FIELD-CAST CONNECTIONS FOR PREFABRICATED DECK PANELS: Performance of Pre-Bagged Connection Grouts <i>Zachary Haber, Professional Service Industries, Inc.</i>	Extending application of Simple for Dead Load and Continuous for Live Load (SDCL) steel bridge system to high seismic areas <i>Ramin Taghinezhad, FIU</i>	Use of Lightweight Concrete for Bridges Moved into Place <i>Reid Castradale, Castradale Engineering Consultants, PC</i>
3:00 PM - 3:30 PM	COFFEE BREAK – EXHIBIT HALL				
3:30 PM – 4:00 PM	G-1: STATE ABC EXPERIENCES II Advances in Accelerated Bridge Construction in Washington State Seismic Regions <i>Bijan Khaleghi, WSDOT</i>	G-14: ABC BRIDGE DECK CASE STUDIES Precast Grid Deck Panels Used to Accelerate Rehabilitation of GADOT I-20 Bridges <i>Mark Kaczinski, Bridge Grid Flooring Manufacturers Association (BGFMA)</i>	G-15: ABC APPLICATION FOR RETROFIT Long key bridge v-piers rehabilitation <i>Luis Vargas, URS Corporation Southern</i>	G-11: ABC RESEARCH III Tools to estimate the total cost of ABC projects versus conventional methods of construction <i>Mohammad Hadi, FIU</i>	G-20:SHRP2- R04 RELATED PROJECTS Innovative Bridge Designs for Rapid Renewal, SHRP2 R04, Lessons Learned <i>Finn Hubbard, Fish & Associates Inc.</i>
4:00 PM – 4:30 PM	Replacement of SR 0581 Twin Bridge Superstructures over Weekends <i>Harivadan Parikh, Pennsylvania Department of Transportation</i>	Route 37 Mathis Bridge Eastbound over the Barnegat Bay - Deck Replacement and Rehabilitation <i>Rama Krishnagiri, Parsons Brinckerhoff</i>	ABC Techniques for Pier Repairs and the Repositioning of the Cumberland River Swing Bridge <i>Duncan Paterson, HDR Inc.</i>	Laboratory Investigation of Integral Abutment Connection Details for ABC Projects <i>Travis Hosteng, Iowa State University</i>	Contextually Appropriate ABC Policy, Adding to WSDOT's Bridge Design Manual <i>Patrick Gallagher, Washington State DOT</i>
4:30 PM – 5:00 PM	Update on PennDOT's Public-Private Partnership (P3) Rapid Bridge Replacement (RBR) project <i>Patricia Kiehl, PennDOT</i>	Application of New Surfacing to the George Washington Bridge using Pre-Paved, Pre-Fabricated Panels and Conventional Techniques with Plant Mix Modified Asphalt Materials <i>Geoffrey Rowe, Abatech</i>	Hybrid Precast Bridge Widening Pulls It All Together to Save Time and Money <i>John Lange, Stanley Consultants Inc.</i>	Accelerated Bridge Construction (ABC) Toolkit for Georgia City and County Roads <i>Junsuk Kang, Georgia Southern University</i>	Accelerated bridge construction, sacaton, az gila river indian community <i>Greg Harasha, FNF Construction, Inc.</i>
5:00 PM – 5:30 PM	Accelerated Bridge Construction studies for Six City of Astoria Bridges <i>Hormoz Seradi, Oregon Department of Transportation</i>	Rigid End Floorbeam/Cross Girder Replacement on the Pulaski Skyway Rehabilitation Project <i>Scott Thorn, New Jersey DOT</i>	Innovative and new UHPC products and details for accelerating bridge retrofit <i>Atorod Azizinamini, FIU</i>	Renewing America's Infrastructure – SHRP2 at Work <i>Matthew DeMarco, FHWA</i>	Implementing the SHRP2 R04 Research Results <i>Bala Sivakumar, HNTB</i>
6:00 PM – 9:00 PM	RECEPTION AND ENTERTAINMENT AT EXHIBIT HALL				

CONFERENCE PRESENTATIONS AT A GLANCE

CONFERENCE PRESENTATIONS - TUESDAY DECEMBER 8 (MORNING 8:00 AM – 12:00 PM)					
ROOM	JAMES L. KNIGHT CENTER	ORCHID	JASMINE	HIBISCUS A	HIBISCUS B
8:00 AM – 8:30 AM	G-1: STATE ABC EXPERIENCES III New Development in Accelerated Bridge and Culvert Construction in Washington State <i>Bijan Khaleghi, WSDOT</i>	G-7: ADVANCING SEISMIC RESEARCH FOR ABC I A Class of V-Connectors for Deck-Pier or Pier-Footing Joints with Combined Advantages of Integrated Design and Seismic Isolation while Enabling ABC, <i>Su Hao, ACI, INC.</i>	G-13: ABC CASE STUDIES I ABC of bridge no. 465 Rhode island i-195 ramp (dr-2) over warren avenue <i>About J Alzaim, Louis Berger</i>	G-17: PROMOTING ABC Latest development in steel bridge design and construction with focus on ABC <i>Bill McEleney, NSBA</i>	G-19: MISCELLANEOUS I The Future of Bridge Design <i>Barbara Day, Bentley Systems</i>
8:30 AM – 9:00 AM	Evolution of Design Details for Iowa DOT Modular Bridge Construction: Case Study of Little Silver Creek Accelerated Bridge Construction Project <i>Curtis Carter, Iowa DOT</i>	Grouted Splice Sleeve Connections for Bridge Piers in Seismic Regions: Experiments and Analysis, <i>M.J. Ameli, University of Utah</i>	12 Day Bridge Replacement Project in Vermont with a 47 Mile Detour <i>David Kull, McFarland Johnson, Inc.</i>	Latest development in concrete bridge design and construction with focus on ABC, <i>William Nickas, PCI</i>	Accelerated Bridge Construction - Huey P. Long Bridge Truss Lift Monitoring to Mitigate Risk, <i>Thomas Weinmann, Geocomp Consulting</i>
9:00 AM – 9:30 AM	TDOT CM/GC Experience with ABC – Fast Fix 8 in Downtown Nashville, Tennessee, <i>Lia Obaid, TDOT</i>	Seismic Repair of Damaged Precast RC Bridge Columns Connected with Grouted Splice Sleeves, <i>Chris Pantelides, University of Utah</i>	Sellwood Bridge Diversion Alignment and Bridge Translation <i>Scott Nettleton, T.Y. Lin International</i>	Social Media for ABC: State of Practice and Workshop for ABC Project Owners, <i>Eliza Partridge, Figg Bridge Engineers</i>	Decision Criteria for Deploying Accelerated Bridge Construction <i>Gordana Hering, Rutgers University Center for Advanced Infrastructure and Transportation</i>
9:30 AM – 10:00 AM	Accelerated Bridge Construction in Alaska, Leslie Daugherty, Alaska Department of Transportation & Public Facilities	Innovative ABC columns with copper-based SMA and ECC for seismically active regions <i>Sebastian Varela, University of Nevada, Reno</i>	Bent cap design for IH-635 Managed Lanes Project, <i>Ignacio Navarro, Ferroviario Agroman</i>	ABC national update and overview <i>Ben Beerman, FHWA</i>	Robotic Construction in ABC Projects <i>Alireza Valikhani, FIU</i>
10:00 AM - 10:30 AM	COFFEE BREAK – EXHIBIT HALL				
10:30 AM – 11:00 AM	G-2: ABC PROJECTS WITH GRS-IBC Phased Accelerated Bridge Construction with GRS/IBS Abutments <i>Ralph Verrastro, Bridging Solutions, LLC</i>	G-8: ABC PROJECTS USING SPMT SPMT for Accelerated Bridge Construction – High-grove Underpass <i>Paul Chung, Caltrans</i>	G-13: ABC CASE STUDIES II Reconstruction of the Willis Avenue Bridge with Implementation of ABC Technology <i>Wei Wang, UrbanTech Consulting Engineering</i>	G-11: ABC RESEARCH IV Innovative ABC solutions using UHPC <i>Mohamadreza Shajefifar, FIU</i>	G-19: MISCELLANEOUS II 200+ Years of Accelerated Bridge Construction in America <i>John Hillman, HCB, Inc.</i>
11:00 AM – 11:30 AM	First-Ever Innovative Application of GRS-IBS in the Garden State <i>Ahmad Faqiri, Pennoni Associates Inc.</i>	The 123's of SPMT's for ABC <i>Charles Neth, Siefert Associates, LLC</i>	NJ Route 18 Bridge over US Route 1 Superstructure Replacement and Widening utilizing Prefabricated Superstructure Units <i>Gregory Ricks, HNTB Corporation</i>	ABC Connections with UHPC <i>Benjamin Graybeal, FHWA</i>	Seismic behavior of precast hollow-core columns for accelerated bridge construction <i>Mohamed ElGawady, Missouri University of Science and Technology</i>
11:30 AM – 12:00 PM	Implementation and Research Case Study on a GRS-IBS Project <i>Bob Gilbert, Bartlett & West</i>	Rehabilitation of the Park Avenue and Watchung Avenue Bridge for New Jersey Transit utilizing Self-Propelled Modular Transporters <i>David Mykulak, HNTB Corporation</i>	Salmon river bridges <i>Lee Wegner, Hanson Structural Precast</i>	Construction of UHPC Connections <i>Benjamin Graybeal, FHWA</i>	Safety Indices (B-values) for a full depth Precast Concrete Deck Panel connected with Accelerated Bridge Construction (ABC) <i>Chandrasekhar Putcha, California State University, Fullerton</i>
12:00 PM – 1:30 PM	LUNCH BREAK- EXHIBIT HALL- CASH BUFFET				

CONFERENCE PRESENTATIONS AT A GLANCE

CONFERENCE PRESENTATIONS - TUESDAY DECEMBER 8 (AFTERNOON 1:30 PM – 4:00 PM)					
ROOM	JAMES L. KNIGHT CENTER	ORCHID	JASMINE	HIBISCUS A	HIBISCUS B
	G-1: STATE ABC EXPERIENCES IV	G-7: ADVANCING SEISMIC RESEARCH FOR ABC II	G-5: ABC SUBSTRUCTURES SOLUTIONS	G-16: DESIGN OF ABC PROJECTS FOR SERVICE LIFE	G-12: ADVANCEMENT OF PREFABRICATED BRIDGE ELEMENTS
1:30 PM – 2:00 PM	Connecticut Department of Transportation State Project No. 131-194/195 I-84 over Marion Avenue, Southington Bridge Superstructure Replacement using Self-Propelled Modular Transporters (SPMTs) <i>Mary Baker, Connecticut Department of Transportation</i>	Seismic Accelerated Bridge Construction with Low-Damage Segmental Bridge Columns incorporating Damage-Resistant Joints <i>Mohammad T. Nikoukalam, University of Colorado - Boulder</i>	Experimental Study on Precast Segmental Bridge Columns with Semi-rigid Connections <i>Hsiao-Hui Hung, National Center for Research on Earthquake Engineering</i>	Galvanizing your Bridge for Corrosion Protection <i>Kevin Irving, AZZ Galvanizing Services</i>	Bridge in a Box <i>Kenneth Sweeney, AIT Bridge Systems</i>
2:00 PM – 2:30 PM	FDOT Precast Bent Cap Development and Implementation <i>Steven Nolan, FDOT</i>	Seismic Evaluation of a Precast PT/UHPC Bridge Column with Pocket Connection and Precast Footing <i>Alireza Mohebbi, University of Nevada, Reno</i>	Reconstruction of the First Single Point Urban Interchange Bridge in Michigan Utilizing Prefabricated Substructure Elements <i>Ihab Darwish, Alfred Benesch & Co.</i>	Modern non-bituminous flexible plug expansion joints – minimizing noise, maximizing driver comfort and accelerating bridge maintenance <i>Gianni Moor, Mageba USA</i>	Experimental study of A Precast Barrier Wall System performance for Bridge Decks <i>Zhiqiang Wang, Department of Bridge Engineering, Tongji University, Shanghai</i>
2:30 PM – 3:00 PM	Wisconsin DOT's Development of Standardized and Interchangeable PBES - Piers <i>William Oliva, Wisconsin Department of Transportation</i>	The seismic ductility device <i>George Ghushn, BIG Architecture & Engineering</i>	Precast Pier Construction on Northwest Corridor <i>Ali Ghallib, Parsons</i>	Service Life Extension of Existing Bridge Substructures <i>Jason Chodachek, Vector Corrosion Technologies, Inc</i>	Construction of the Second Generation of Precast Concrete Deck System <i>Fouad Jaber, Nebraska Department of Roads</i>
3:00 PM – 3:30 PM	ABC in Alabama <i>Paul Froede, Alabama Department of Transportation</i>	Shaking Table Performance of a New Precast Bridge Bent System with Pre-Tensioned, Rocking Columns <i>Travis Thonstad, Civil & Environmental Engineering, University of Washington</i>	Post-Tensioned Precast Pier Caps for the Honolulu Rapid Transit Project <i>Joseph Krajewski, HNTB</i>	Experimental testing of UHPC joints of precast concrete bridge deck <i>David Citek, CTU in Prague - Klokner Institut</i>	ABC Construction with an Innovative and Cost-Effective Full Depth Precast Deck Solution <i>Eddie He, AccelBridge</i>
3:30 PM – 4:00 PM	Utah's Experiences with ABC <i>Carmen Swanwick, Utah Department of Transportation</i>	Achieving Caltrans' Strategic Goals through Accelerated Bridge Construction <i>Tom Ostrom, Caltrans</i>	Substructure Considerations for Successful Accelerated Bridge Replacement Projects <i>David Whitmore, Vector Corrosion Technologies</i>	Customized Manual for Design of ABC Projects for Service Life <i>Azadeh Jaberl, FIU</i>	Sustainable precast concrete segmental bridges achieved using ABC <i>Linda Figg, Figg Bridge Engineers</i>