Update on ABC University Transportation Center (ABC-UTC)

by

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Director, ABC-UTC

2015 AASHTO SCOB Meeting
AASHTO T-4 Committee
April 21, 2015
ABC-UTC

Award Announcement : September 2013

Consortium of Universities:
• Florida International University (FIU)
  • Atorod Azizinamini (lead)
• Iowa State University (ISU)
  • Brent Phares & Terry Wipf
• University of Nevada, Reno (UNR)
  • Saiid Saiidi
2015 Accelerated Bridge Construction Conference

The 2015 National ABC Conference, co-sponsored by State DOTs, the Federal Highway Administration and industry partners, will be held on December 7-8, 2015 in Miami, Florida. Attendees are expected from Department of Transportation engineers and other bridge professionals.

Read More.
2015 National Accelerated Bridge Construction Conference
December 7 and 8, 2015
Workshops December 6, 2015
Hyatt Regency, Miami, Florida

2015 National Accelerated Bridge Construction Conference

The 2015 National Accelerated Bridge Construction Conference will be held on December 7 and 8, 2015, at the Hyatt Regency Hotel, in downtown Miami, Florida. The 2014 National Accelerated Bridge Construction Conference that was held in the same hotel, during Dec 4 and 5, 2014, was a great success. More than 750 attended the conference. Among attendees were more than 150 State Bridge Engineers, more than 40 FHWA bridge engineers and many consultants and bridge officials. Acting Administrator of FHWA, Mr. Gregory Nadeau
Submission Deadline: April 30, 2015

Select number of authors: 1

Please enter all author information (in order of author list):
First Name: 
Last Name: 
Position: 
Organization: 
Address: 
City: 
State: 
Country: 
Zip Code: 
Phone: 

☐ Corresponding author

Topic Area:

Do you prefer to present your work as a podium presentation or as a poster? (please note: the selection committee will make the final determination as to the format of your presentation)
☐ Podium  ☐ Poster  ☐ No preference

Paper Title:

Abstract (between 350 and 500 words):
2015
NATIONAL ACCELERATED BRIDGE
CONSTRUCTION CONFERENCE
December 7 and 8, 2015
Workshops December 6, 2015
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2015 National ABC
Conference Awards - Call for Nominations

Nominations due September 15, 2015

The 2015 National ABC Conference will be held December 6-8 in Miami, Florida. During the Conference, awards will again be given to best ABC projects in several categories and most influential person contributing to the cause and implementation of ABC. Submission details and official entry form templates for nominations can be downloaded by clicking the link shown below.

2015 NOMINATION DETAILS & OFFICIAL ENTRY FORM TEMPLATES

The pdf document at the above link provides the criteria and directions. The two Word documents are the official entry form templates for the two award nominations.

To be eligible, nominations must be submitted on the official entry form templates. All entries are due by 11:59 pm EST, September 15, 2015. Submissions received after that date will not be accepted.

Entries are to be submitted via email to Aton Rod Azizinamini. If you are not able to email your entry or need further clarification, contact Aton Rod Azizinamini at (402) 770-6210 for assistance. Winners will be announced at the 2015 National Accelerated Bridge Construction Conference.

Award Categories

1. Most Influential Person Contributing to the Cause and Implementation of ABC
2. Best ABC Project in the following categories:
   a. Lateral Slide Technology
   b. Self-Propelled Modular Transporters
   c. Prefabricated Bridge Elements and Systems
   d. Emergency
Your Suggestions on 2015 National ABC Conference

• Presentations that must be included
  • Presentation topic
  • Suggested speaker

• Ideas for workshops
ABC-UTC Focus Areas

- Research
  - 11 ongoing projects, initiated in 2014
  - Will be considering additional projects for 2\textsuperscript{nd} round funding in near future

\textbf{Note:} An advisory committee has been formed for each ongoing research project to monitor progress
ABC-UTC Research Projects

- Florida International University (FIU)
  - Compilation of All ABC Research-Ongoing & Completed
  - Compilation of Available Short to Medium Span ABC Systems
  - Extending Application of Simple for Dead & Continuous for Live Load Steel Bridge System to ABC Applications in Seismic Regions - Phase I, Numerical Study
  - Estimating Total Cost of Bridge Construction using ABC and Conventional Methods of Construction
  - Development of Manual for Enhanced Service Life of ABC Projects
Development of Manual for Enhanced Service Life of ABC Projects

Development of quantitative data to study field performance of closure pour regions
Have tested two bridges
Will be testing additional bridges
Impulse Response Test (IR)
Three Specimen Details
<table>
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<th></th>
<th>Stiffness (Cross section) (Kip/in)</th>
<th>Stiffness Ratio 1 (BOX/Folded) (Top Flange)</th>
<th>Stiffness Ratio 2 (BOX/Folded)</th>
<th>Stiffness Ratio 3 (BOX/Folded)</th>
<th>Stiffness Ratio 4 (BOX/Folded) (Clouser)</th>
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Folded Plate Mobility (slab thickness 7.5")
Box Girder Mobility (slab thickness 8.5")
Analytical Mobility for Folded Girder Regarding Its Stiffness Ratio to Box Girder
IR Test from Top and Bottom of Slab
ABC-UTC Research Projects

- Iowa State University (ISU)
  - Development of Prefabricated Bridge Railings
  - Strength, Durability, and Application of Grouted Couplers for Integral Abutments in ABC Projects
  - Synthesis: Rapid Bridge Rehabilitation
Research Topics

• We are soliciting ideas for second round of research
• We welcome to team up with DOTs in developing ABC solutions
Thank You