

Accelerated Bridge Construction Tools & Resources



Photos courtesy: UDOT, MDOT, ADOT, MassDOT

SHRP2 Resources on Innovative Bridge Designs for Rapid Renewal

Innovative Bridge Designs for Rapid Renewal (R04) AASHTO Product Website

Tools and information related to this SHRP2 product, reports on how states are using R04 ABC Toolkit, training presentations, fact sheets, videos, and more.

<http://shrp2.transportation.org/Pages/Bridge-Designs-for-Rapid-Renewal.aspx>

Innovative Bridge Designs for Rapid Renewal FHWA Product Website

Information on R04 implementation activities from states, webinar recordings, case studies, and brochures.

[www.fhwa.dot.gov/goshrp2/Solutions/Renewal/R04/Innovative Bridge Designs for Rapid Renewal](http://www.fhwa.dot.gov/goshrp2/Solutions/Renewal/R04/Innovative_Bridge_Designs_for_Rapid_Renewal)

Innovative Bridge Designs for Rapid Renewal ABC Toolkit

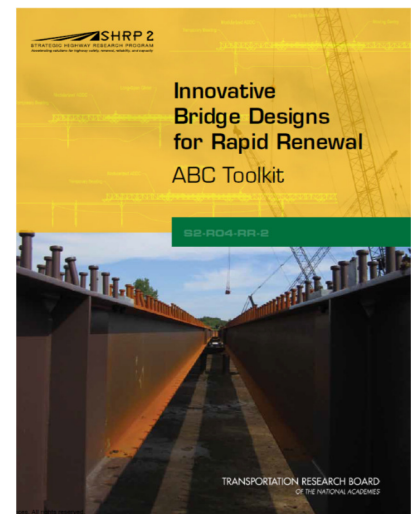
Published by the Transportation Research Board (TRB), the *ABC Toolkit* includes design standards and design examples for complete prefabricated bridge systems, and proposes specification language for accelerated bridge construction (ABC) systems, which adheres to the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design and Construction Specifications.

<http://www.trb.org/Main/Blurbs/168046.aspx>

Innovative Bridge Designs for Rapid Renewal Research Report

Published by the TRB, this report highlights the development of standardized approaches to designing and constructing bridge systems for rapid renewal.

www.trb.org/Main/Blurbs/167693.aspx



Accelerated Bridge Construction Websites

Federal Highway Administration Accelerated Bridge Construction Website

Contains FHWA's *Accelerated Bridge Construction Manual*, project planning tools, information on slide-in bridge construction, Prefabricated Bridge Elements and Systems, and ABC-related events.

www.fhwa.dot.gov/bridge/abc

Transportation Research Board Subcommittee on Accelerated Bridge Construction Website

The ABC Subcommittee supports research, technology transfer, and implementation to advance ABC technologies related to policy, planning, procurement, design, materials, construction, and contracting.

www.trbaff103.com/

AASHTO Subcommittee on Bridges and Structures (SCOBs) Website

Hosts Bridges and Structures Annual Meeting, offers guidelines and reports, and houses various technical committees.

<http://bridges.transportation.org/>

Accelerated Bridge Construction University Transportation Center Website

The ABC-UTC at Florida International University works to advance the frontier of ABC; transfer the state-of-the-art ABC knowledge to the profession; develop a next-generation ABC work force; and collaborate with the Federal Highway Administration (FHWA), AASHTO, and others to make ABC the best solution for the nation's aging bridge infrastructure.

<https://abc-utc.fiu.edu/>

Accelerated Bridge Construction Reports, Tools, and Manuals

Slide-in Bridge Construction Cost Estimation Tool Guidelines

Developed for FHWA's Every Day Counts Initiative, this publication provides a general guideline for state Departments of Transportation to estimate the cost of slide-in bridge construction (SIBC) for common bridge replacements.

http://www.fhwa.dot.gov/construction/sibc/pubs/costest/sibc_costest.pdf

Precast Prestressed Concrete Bridge Design Manual Third Edition

Describes the effective use of precast and precast, prestressed concrete components.

<https://pci.imanuscript.com/ProductDetails.aspx?productID=117>

PCI State-of-the-Art Report on Full-Depth Precast Concrete Bridge Deck Panels

A state-of-the-art guide for selecting, designing, detailing, and constructing precast full-depth deck panels for bridge construction.

<https://pci.imanuscript.com/ProductDetails.aspx?productID=120>

PCI State-of-the-Practice Report of Precast/Prestressed Adjacent Box Beam Bridges

Presents the state of the practice on adjacent precast pretensioned box beam bridges.

<https://pci.imanuscript.com/ProductDetails.aspx?productID=121>

PCI Curved Precast Concrete Bridges State-of-the-Art Report

Details the application of curved precast concrete bridge design, fabrication, construction techniques, and considerations through the study of twelve related projects and constitutes a state-of-the-art report on this topic.

<https://pci.imanuscript.com/ProductDetails.aspx?productID=133>

State ABC Manuals & Tools

Structures Design and Detailing Manual, Utah Department of Transportation

<https://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:1730>,

ABC Decision Making and Economic Modeling Tool, Oregon Department of Transportation

http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/2011/ABC.pdf

ABC Decision Making Tool, Wisconsin Department of Transportation

<http://wisconsin.dot.gov/dtsdManuals/strct/manuals/bridge/ch7.pdf>

