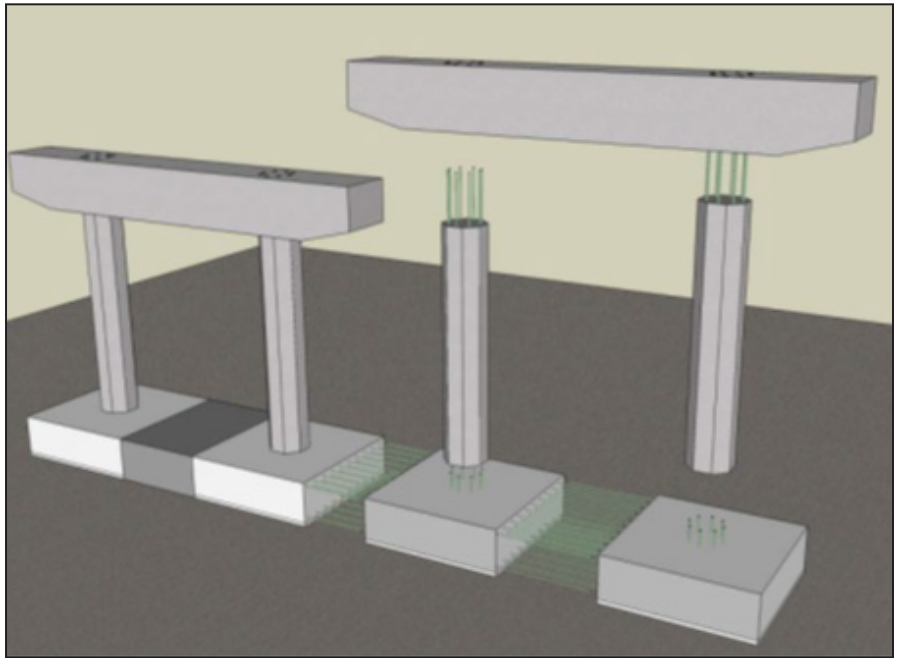


# MOUNTAIN-PLAINS CONSORTIUM

RESEARCH BRIEF | MPC 17-331 (project 395) | September 2017

## Implementation Guidance for Accelerated Bridge Construction in South Dakota



### the **ISSUE**

Investigate typical accelerated bridge construction methods and their applicability in South Dakota.

### the **RESEARCH**

A study was conducted to investigate the implementation of accelerated bridge construction (ABC) in South Dakota. The main objective of this study was to implement a systematic method for evaluating ABC techniques to determine their applicability to bridge construction and rehabilitation projects in South Dakota from a cost effectiveness standpoint. A comprehensive literature review was conducted to develop a catalog of ABC techniques, as well as detailed profiles describing the use of these techniques. This research was geared toward developing both the knowledge base and the tool to evaluate if implementation of ABC techniques is beneficial to a particular project scenario based on South Dakota local cost and experience data. Many other state DOT offices currently have evaluation tools for ABC and some were used as references when designing the tool for SDDOT. Examples for using the developed tool were also included in this study to illustrate the use of the evaluation tool for ABC decision making in South Dakota.



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North Dakota State University  
South Dakota State University

University of Colorado Denver  
University of Denver  
University of Utah

Utah State University  
University of Wyoming



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### Project Title

Implementation Guidance  
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### Sponsors | Partners

USDOT, Research and  
Innovative Technology  
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## the FINDINGS

Development of a catalog of ABC techniques to inform the user of what has been used in the past and how each technique was implemented into the construction of a bridge project. The evaluation tool developed in this study laid out the framework for a simplified assessment for ABC applicability in South Dakota.

## the IMPACT

This study provided a systematic way to evaluate the impact of ABC on projects and provided a basis for decision making regarding adoption of ABC.

For more information on this project, download the entire report at <http://www.ugpti.org/resources/reports/details.php?id=886>

For more information or additional copies, visit the Web site at [www.mountain-plains.org](http://www.mountain-plains.org), call (701) 231-7767 or write to Mountain-Plains Consortium, Upper Great Plains Transportation Institute, North Dakota State University, Dept. 2880, PO Box 6050, Fargo, ND 58108-6050.



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