Buchanan County honored for railroad flatcar bridges

Editor’s note: This article originally appeared in the Dec 2007 issue of Technology News, but the information in the article was incomplete. We are reprinting the corrected article here, with our apologies.

Buchanan County’s secondary roads department was recently honored with a national award for its innovative and cost-effective bridge solutions: railroad flatcar bridges.

In September in Chattanooga, Tennessee, Buchanan County Engineer Brian Keierleber accepted the 2007 Excellence in Regional Transportation Award from the National Association of Development Organizations (NADO) on behalf of the county.

Buchanan County has been a leader in purchasing and installing flatcars as replacements for older bridges on lower level roads. In addition to being a novel use for retired train cars, the bridges are incredibly cost efficient, costing on average one-third the price of standard concrete slab bridge construction and requiring only one-half to two-thirds the construction time.

“We rock right across their tops,” explains Keierleber.

County bridges in rural areas don’t carry a large volume of traffic but they do experience heavy agricultural loads, Keierleber explains. Careful design, engineering, and analysis go into each flatcar bridge to ensure it can carry the loads.

Fourteen flatcar bridges have been installed in the county since 2003. The concepts for the design of the railroad flatcar bridges were developed through a series of research projects sponsored by the Iowa DOT and the Iowa Highway Research Board; the research was conducted by the Bridge Engineering Center at Iowa State University.

For more information
For more information about the railroad flatcar bridge projects, view the reports Demonstration Project Using Railroad Flatcars for Low-Volume Road Bridges (TR-444) and Field Testing of Railroad Flat Car Bridges (TR-498 Volumes I and II) online at http://www.dot.state.ia.us/operationsresearch/reports.aspx

With careful design, engineering, and analysis, Buchanan County is experiencing success with cost-effective railroad flatcar bridges.