Build a better mousetrap:
Sign trailer modification

ED BLACK, automotive mechanic with the Iowa DOT’s Council Bluffs garage, ran into a problem transporting signs when the Highway Division changed the recommended sign types from wooden to metal frames (Lang support and Windmaster).

“The old signs had rectangular wooden bases, and our sign trailers were designed to carry those,” said Black. “The Lang signs have metal bases and slide-on legs. They wouldn’t fit in the sign trailers.”

So, Black renovated a sign trailer to accommodate the new signs. With the renovated trailer, only one person is needed to unload signs.

Black used flat steel, Telspar post remnants and one-half inch cold rolled steel to brace the sign legs. To carry more signs, he tilted the trailer’s arrow board so that signs stand upright instead of lie down.

He boxed in the back of the trailer for the Windmaster signs and sand bags and used tubing for metal leg storage and the Windmaster signs.

Black spent about $700 for materials and 48 hours renovating two of the shop’s four trailers.

Each revamped trailer holds 13 Lang support signs, eight Windmaster signs, and sand bags, compared to the eight wooden signs it held before.

For more information, contact Ed Black, 712-366-0332, edward.black@dot.state.ia.us.

Editor’s Note: “Sign trailer modification” is the third in a series of several winning innovations from the “Better Mousetrap” competition at the 2003 Iowa Maintenance Training Expo. In each issue of Technology News we are highlighting one of the winners. For information about other winning “mousetraps,” see CTRE’s website: www.ctre.iastate.edu/ (under the “Services” category).