

Asphalt Tailgate Extension

Project Number 2014-01

Project Leader Jerry Hayes

Agency Cottonwood County Highway Department

1355 9th Avenue Windom, MN 56101

Phone 507-831-1389

Problem The nearest hot-mix asphalt plant is 40 miles

away from the Cottonwood County line. During patching operations, highway department crews were experiencing issues keeping the hot mix in the truck while repairing potholes and skin patches. The county needed a better way to control how much material was used per

patch while eliminating the cooling of the hot-mix asphalt.

Solution Engineers designed a covered "gate" for the hot-mix truck that controls the amount of

material being distributed and prevents the mix from losing heat. The gate can hold 6 to 12 tons of material and can be used for gravel of various sizes in addition to hot-mix asphalt.

Procedure The county consulted its maintenance employees and some local welders to come up with

a design for the hot-mix gate. After hearing suggestions, county engineers approved the creation of a hot-mix gate that matched the design criteria. The new gate replaced the truck's existing tailgate, using the original pins and tailgate latch. The gate is also shaped at an angle

to the center so that it can be hydraulically operated from the cab of the truck.

Results Initial tests using the gate went well, and maintenance employees say the jobs performed

with the new gate have gone more smoothly than those performed before it was installed. County officials believe the gate will save labor and equipment costs and could also result in a

reduction of worker's compensation claims.

Approximate Cost \$3,480

OPERA Funding \$3,480

Implementation Cottonwood County has already placed more than 72 tons of hot-mix asphalt using the new

gate. County officials plan to construct a second gate in the future.

Status Complete

Prepared by:

Minnesota Local Technical Assistance Program (LTAP) Center for Transportation Studies University of Minnesota 200 Transportation and Safety Building 511 Washington Avenue S.E. Minneapolis, MN 55455-0375

Phone: 612-626-1077 Fax: 612-625-6381

E-mail: mnltap@umn.edu Web: www.mnltap.umn.edu

Local OPERA Program partners: Minnesota Local Road Research Board (LRRB), Minnesota Department of Transportation (MnDOT), and Minnesota Local Technical Assistance Program (LTAP) at the Center for Transportation Studies, University of Minnesota.

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