

THE EVOLUTION OF PAVING: 100 YEARS OF PROGRESS

National Concrete Consortium (NCC)
September 10, 2014
Omaha, Nebraska







U.S. Post Lauderdale Fla Jan 1971



Burnside's Mud March - The Hellish Slog

(January 21, 1863)

D.L.

7th Street Bridge Des Moines Iowa.
Oct 1, 1914



FIRST AVE. BRIDGE
CEDAR RAPIDS, IOWA.
September 1st. 1919.





- INDEX (County Road)

Ritchie Co
1921







OFF TO WORK WE GO!



CREW # 2



1921

Koss CONSTRUCTION CO.
BUILDERS

CLINTON - DE WITT ROAD

LENGTH 17.2 MILES

HIGHEST TYPE REINFORCED CONCRETE DESIGN
ALL STATE RECORDS FOR BUILDING CONCRETE
ROADS BROKEN ON THIS CONTRACT
OVER SEVENTEEN MILES CONCRETE ROAD LAID IN
FIVE MONTHS





Highway builders then
heeded the lessons learned
by railroad men.















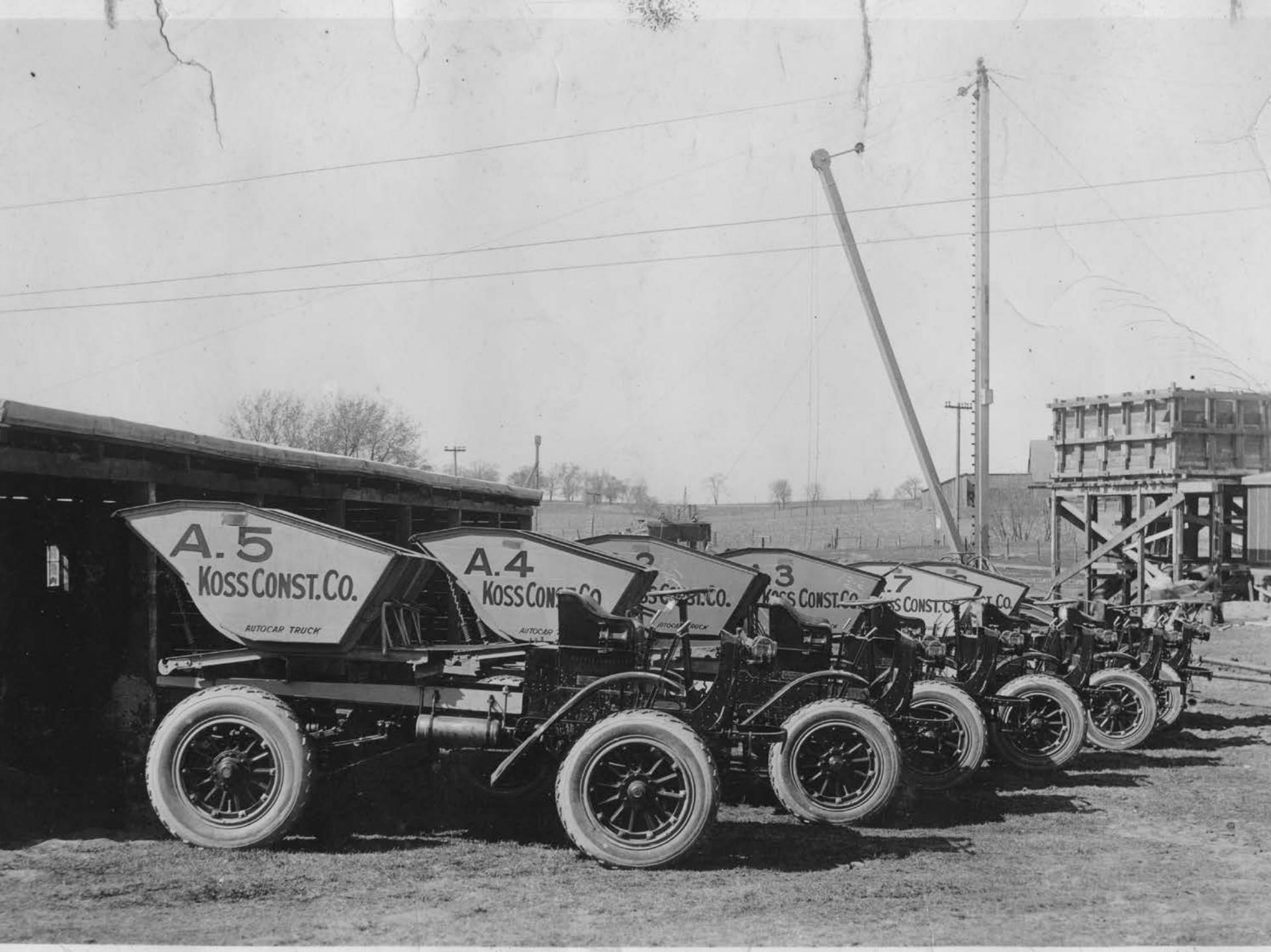






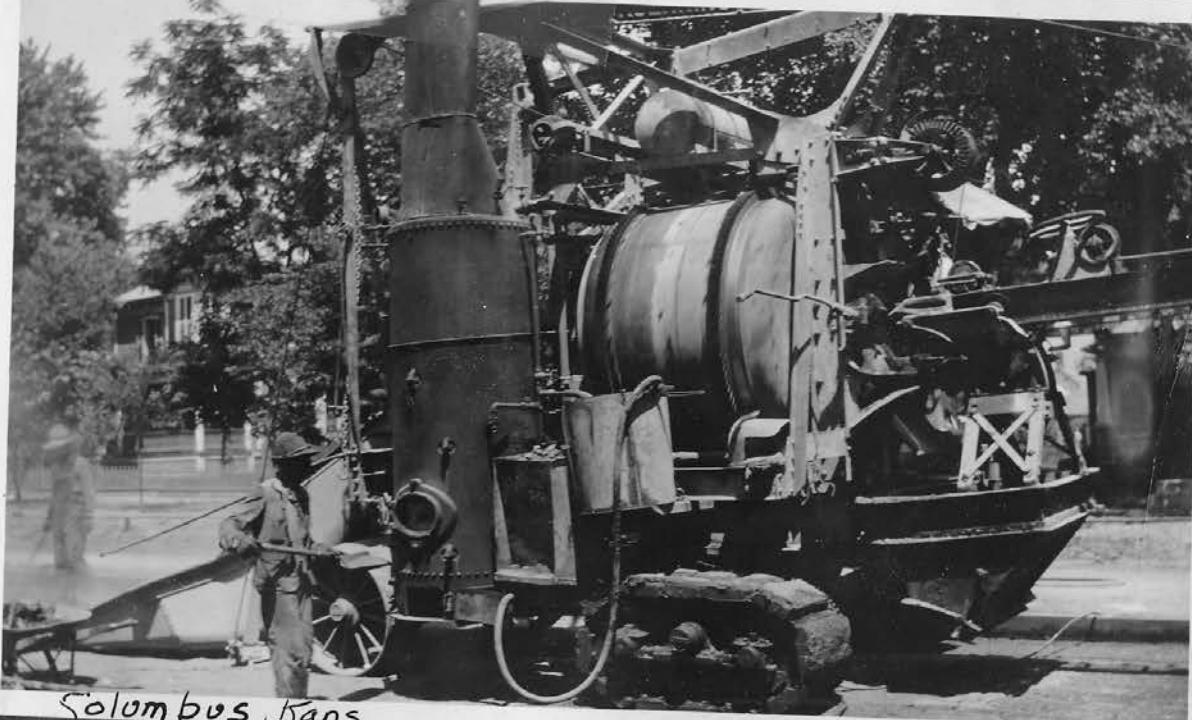






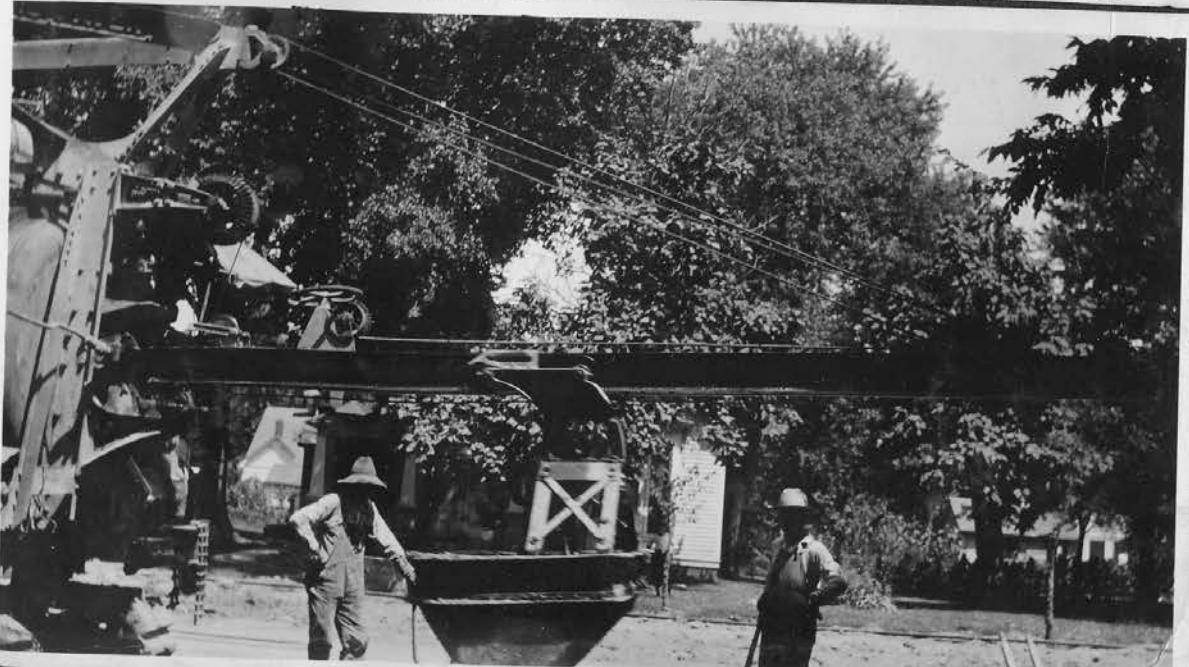


Columbus, Kans. July 1923



Columbus, Kans.

July 1923.





Crawford Co. Kansas
Pittsburg North.
1924







1927. Deposito Moss CONST Co. 614 Avenida de La Union

Esta vista tampién fué tomada en la República de El Salvador y muestra la famosa pala de arrastre "Fresno" que para nivelación y mover tierra a poca distancia ha sido objeto de elogios de parte de todos los que la han visto trabajar.





KOSS-CONSTRUCTION-CO.
LIMA PERU





ERNESTO CALVO
CRAVAGLIO
BOGGY 130 - 1910 - FERRO







STEWART
CENTREVILLE, MO.





THE ENGINEERS



An Interesting Experiment In Concrete Curing

Koss Construction Company Builds a Concrete Pavement in Which a New Curing Method is Tried



Koss Construction Company's outfit on Route 19, Audrain County. Bureau Chiefs of the Highway Department are shown inspecting this highly efficient outfit.

A method of curing concrete, referred to as stress-curing, which, as far as we know, is entirely novel and original, was recently tried by the Missouri State Highway Department on a one and a half mile stretch of 20 foot concrete slab on Route 19 in Audrain County. The experiment on this short stretch of road seeks to determine if it is possible to prevent transverse cracks in the slab by keeping the slab in compression longitudinally while the concrete is hardening, during which time the concrete normally tends to shrink, which it is believed tends to create a multiplicity of microscopic cracks which rupture the slab and later develop into perceptible cracks.

The slab on this mile and a half stretch was divided into several sections approximately 1000 feet long. Alternate 1000 feet sections were cured by the new method, the stretches between the experimental sections being cured by the regular method. None of the slab on this job contained any reinforcing, either of mesh or bars. Both experimental and regular sections were cured by covering with cotton blankets which were kept wet for three days. Three quarter inch open joints were constructed in the slab at variable intervals from 40 to 100 feet apart. Longitudinal pressure was applied by inserting, flat, into this joint a cotton reinforced rubber hose about four and one-half inches in diameter which was closed tightly at each end by metal clamps.



View of transverse joint showing the hose in the joint, the clamps and pressure gauge, and pressure being applied with an ordinary tire pump. Pressures up to 150 pounds per square inch were readily obtained.



RESTRICTED

This document contains information affecting the national defense of the United States within the meaning of the Espionage Act 50, U.S.C., 31 and 32, as amended. Its transmission or revelation of its contents in any manner to an unauthorized person is prohibited by law.











KOSS

CONSTRUCTION CO.

General Contractors Since 1914

DES MOINES
IOWA

LOEHRE

1940









KOEHRING

Air Controlled AUTOCYCLE OPERATION



Seconds are saved with each cycle of operation. High Speed Production of the Koehring Twinbatch 34-E is made possible because of air-controlled Autocycle operation. Charging, mixing and the automatic batchmeter timed operations. The batchmeter actuates the air valves controlling the transfer and discharge chutes. A large air storage tank, supplied by an air compressor driven by the power unit, provides sufficient air capacity for all operations.

KOEHRING COMPANY • Milwaukee, Wis.

Koehring High Speed Twinbatch 34-E Paver, paving a 30-foot wide concrete highway.



HEAVY-DUTY CONSTRUCTION EQUIPMENT





Superior
Studio

JOB #59 - SALINE COUNTY, MISSOURI, 1963





















JUN

56

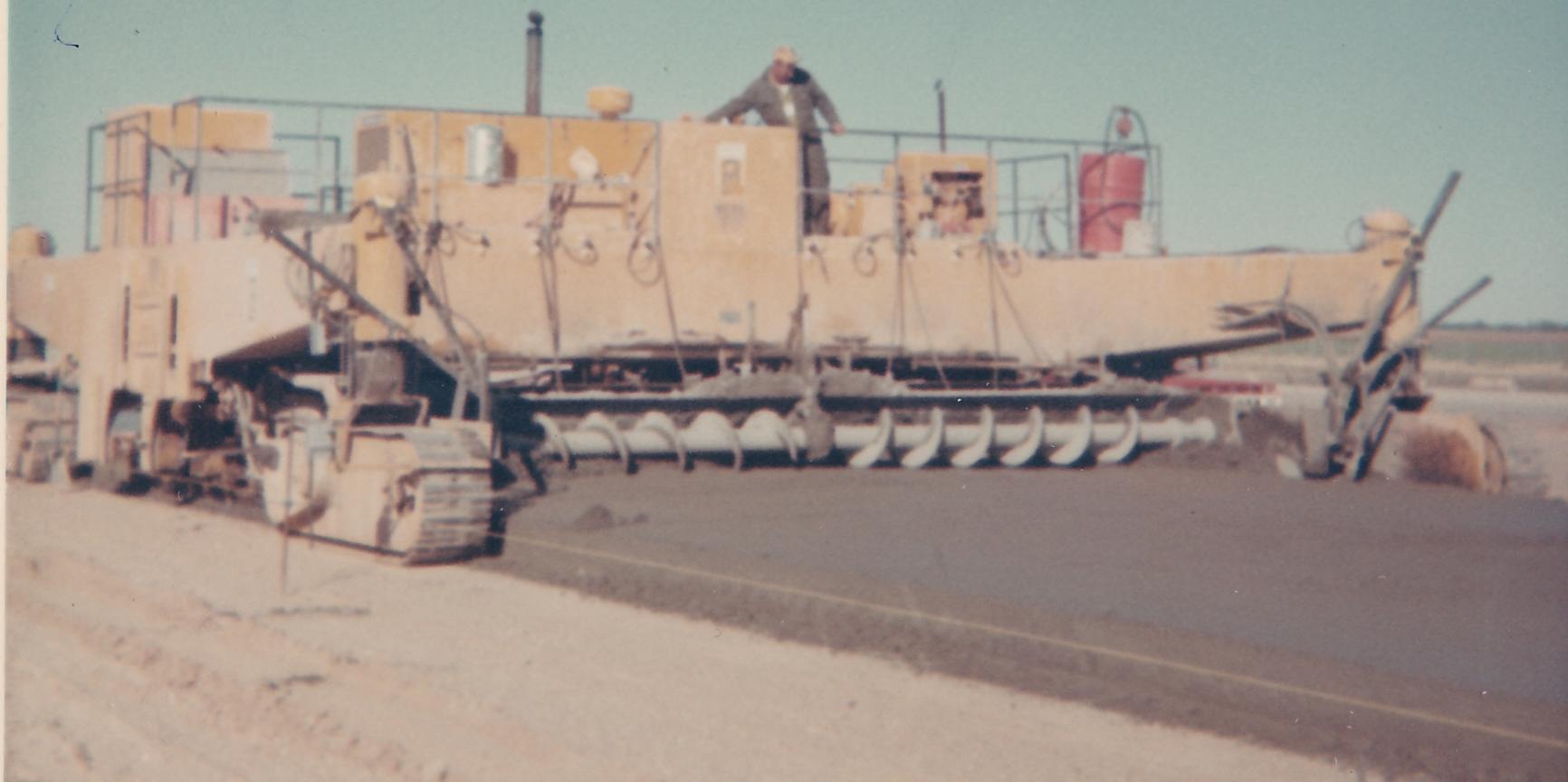
POTTAWATTAMIE COUNTY, IOWA 1966



McPherson Co., Kans. #39



OCT
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60







70

AUG



KOSS
CONSTRUCTION CO.
TOPEKA KANS. SPRINGFIELD Mo.
DES MOINES
IOWA

CM CORPORATION
cmi



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AUG •









**KOSS
CONSTRUCTION CO.**

CMC[®]











GUNTERT
& ZIMMERMAN

S850

National Concrete Pavement
Technology Center



U.S. Department of Transportation
**Federal Highway
Administration**



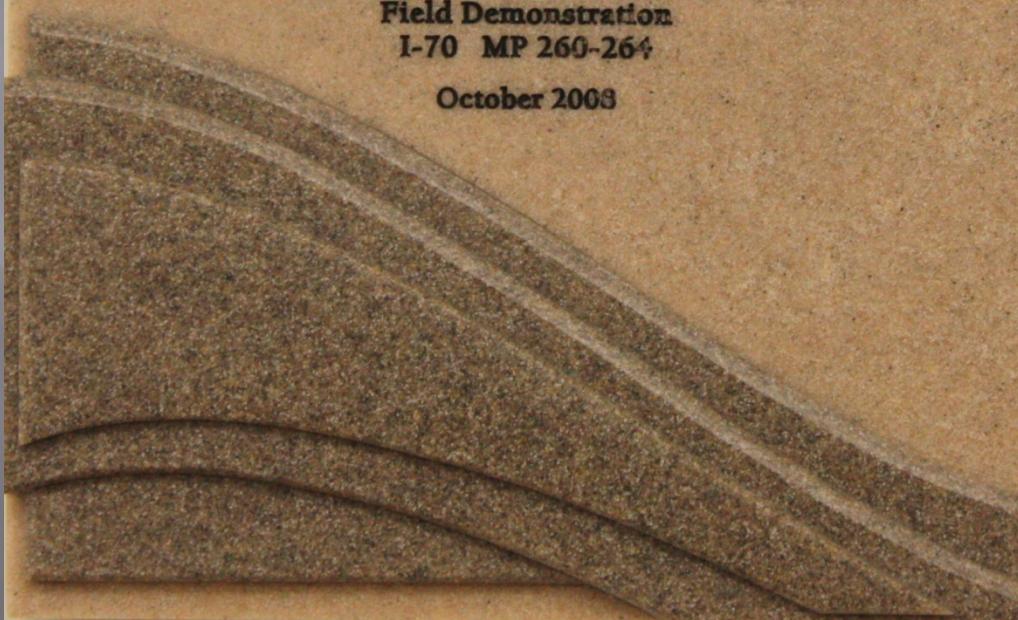
Presented to

*Koss
Construction Company*

In recognition of your
leadership and innovation
in advancing concrete pavement technology

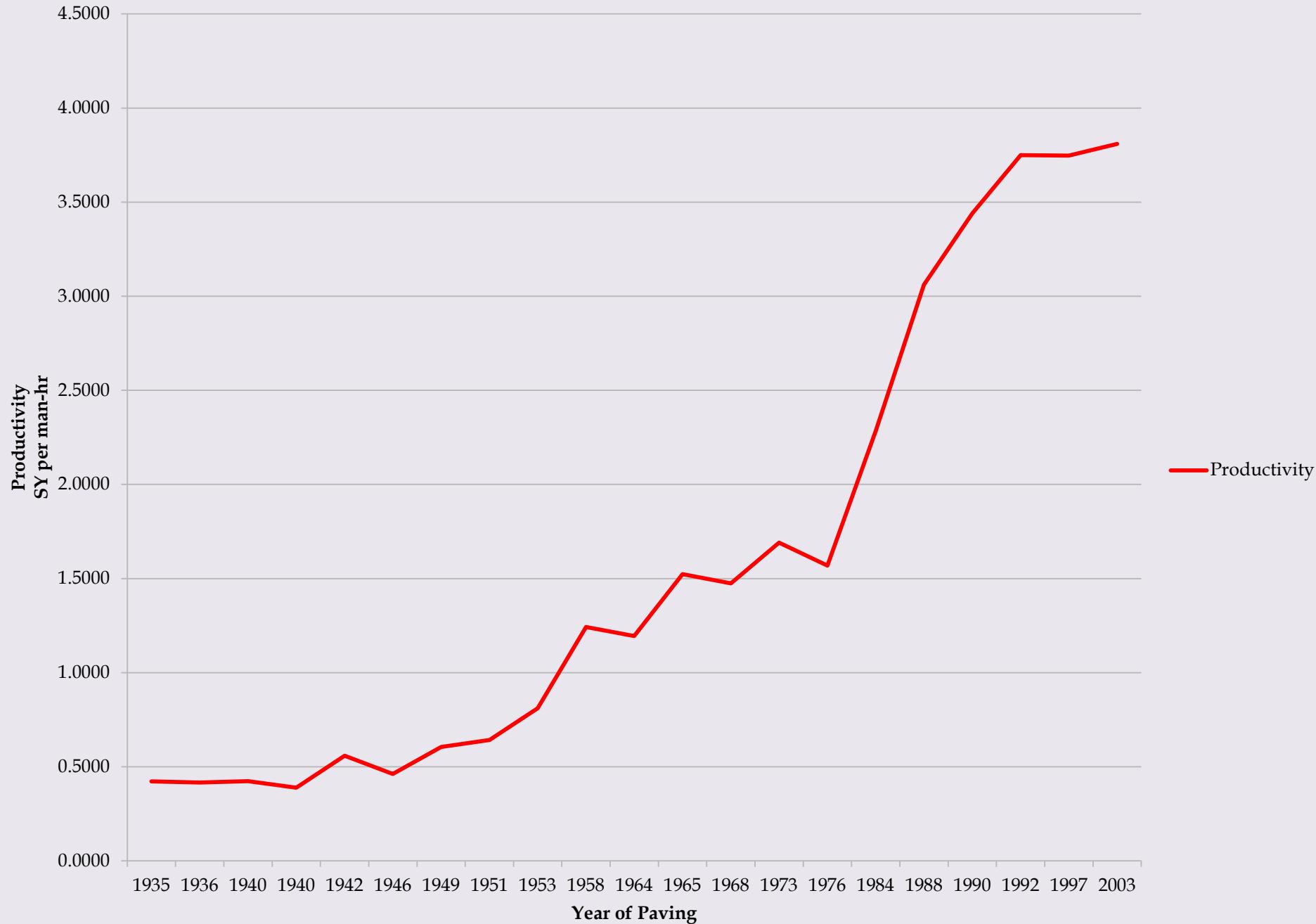
National Two-Lift Concrete Paving
Field Demonstration
I-70 MP 260-264

October 2003





Concrete Pavement Construction Productivity







CREW # 2



THIS IS THE FIRST PROJECT
IN THE UNITED STATES
COMPLETED UNDER PROVISIONS OF THE NEW
FEDERAL AID HIGHWAY ACT OF 1956
EIGHT MILES CONCRETE PAVEMENT ON US-40
INTERSTATE ROUTE NO. 1
STATE HIGHWAY COMMISSION OF KANSAS





KOSS
CONSTRUCTION





4.22.0

















ROBERT

KOSS
CONSTRUCTION CO
FIELD OFFICE

PRIVATE

OFFICE





KOSS CONST. CO.

EMPLOYEE PICNIC

No. 3







HARD ROADERS

SINCE 1912

www.kossconstruction.com