

Series No. 141
Engineering Extension

**proceedings of the 59th annual
road school**

held at

Purdue University, March 7-10, 1973

edited by

D. G. Shurig, Associate Professor of Highway Engineering

road school co-chairmen

W. H. Goetz—Assistant Head, School of Civil Engineering

H. L. Michael—Professor of Highway Engineering

Assoc. Director, Joint Highway Research Project

purdue university • west lafayette, ind.

CONTENTS

	Page
PREFACE	1
EFFECTIVE FAIL-SAFE HIGHWAY STRUCTURES	
F. J. Tamanini	
Chief, Structures and Applied Mechanics Division	
FHWA, Washington, D. C.	10
RESEARCH ON ENVIRONMENTAL FACTORS AFFECTING HUMAN BEHAVIOR	
Gerson J. Alexander	
Chief, Human Factors Branch	
Office Traffic Operations	
Washington, D. C.	51
CURRENT FEDERAL PROGRAMS OF TRANSPORTATION FINANCING	
Gerald D. Love	
Regional Federal Highway Administrator	
Region 5, Homewood, Illinois	57
ALTERNATIVE METHODS OF FINANCING MASS TRANSIT	
William R. McGrath	
Director Transportation Planning Group	
Raymond, Parish and Pine	
Yorktown Heights, New York	63
INDIANA STATE HIGHWAY REPORT 1972-1973	
Richard A. Boehning, Chairman	
Indiana State Highway Commission	
Indianapolis, Indiana	70
TRANSPORTATION MODES, PAST, PRESENT AND FUTURE—AS SEEN BY A HIGHWAY ENGINEER	
R. H. Harrell, Executive Director	
Indiana State Highway Commission	
Indianapolis, Indiana	78

FEDERAL FINANCING OF TRANSPORTATION TRENDS AND POLICIES	
Roger H. Zion, Representative to Congress Indiana 8th District Member, Subcommittee on Roads U. S. House of Representatives, Evansville	
	85
SEGMENTAL PRECAST CONCRETE BRIDGES	
Brice F. Bender Prestressed Concrete Division Construction Products Corporation Lafayette	
	86
BUILDING EMBANKMENTS WITH SHALES	
L. E. Wood, Associate Professor of Civil Engineering C. W. Lovell, Jr., Associate Professor of Civil Engineering Purdue University P. Deo, Soils Engineer American Testing and Engineering Corporation Indianapolis	
	90
SANITARY LANDFILL METHOD OF SOLID WASTE DISPOSAL	
John M. Bell, Associate Professor School of Civil Engineering, Purdue University	
	110
DESIGN AND PERFORMANCE OF CONTINUOUSLY REINFORCED CONCRETE PAVEMENTS	
Eldon J. Yoder, Research Engineer Asif Faiz, Research Assistant Joint Highway Research Project, Purdue University	
	131
USE OF ADVANCED TECHNOLOGY FOR TRAFFIC CONTROL IN SMALL URBAN AREAS	
Roy C. Loutzenheiser, Research Engineer Joint Highway Research Project, Purdue University	
	148
THE HIGHWAY SAFETY PROGRAM AND THE TRAFFIC ENGINEER	
H. Milton Heywood Regional Traffic Engineer Region 5, FHWA	
	153
SMALL CITY TRAFFIC IMPROVEMENTS FROM ACCIDENT ANALYSIS	
Paul C. Box Paul Box and Associates Skokie, Illinois	
	163

HERPIC PROGRESS REPORT 1959-1972

William H. Goetz, Director

Highway Extension and Research Project for Indiana Counties 172

**APPRAISING EQUIPMENT NEEDS FOR COUNTY
HIGHWAY DEPARTMENTS**

Steve Panke, Past President

Equipment Distributors Association of Indiana 179

