proceedings of the 52nd annual road school

held at
PURDUE UNIVERSITY
March 28-31, 1966
compiled and edited by
D. G. Shurig
Associate Professor of Civil Engineering
and the staff of the
Joint Highway Research Project

purdue university • lafayette, ind.
CONTENTS

PREFACE ................................................................................................................................. 1
AN ADEQUATE HIGHWAY SAFETY PROGRAM............ 11
   F. L. Anthony, Assistant Regional Engineer,
   U.S. Bureau of Public Roads
TRAFFIC SUPERVISION AND ROAD SAFETY............ 21
   J. Stannard Baker, Director, Research and Development
   Traffic Institute, Northwestern University, Evanston, Illinois
TRAFFIC ENGINEERING AND TRAFFIC SAFETY........ 27
   A. L. Hutchison, President, Institute of Traffic Engineers,
   Los Angeles, California
HOW THE TRAFFIC ENGINEER CAN ASSIST THE
   TRAFFIC COURT JUDGE................................................................. 31
   Robert H. Reynolds, Assistant to the Director,
   Traffic Court Program, American Bar Association
THE ADMINISTRATION OF JUSTICE AND
   HIGHWAY SAFETY......................................................................... 37
   Robert H. Reynolds, Assistant to the Director,
   Traffic Court Program, American Bar Association
STATEWIDE SAFETY PROGRAM................................. 44
   Clinton A. Venable, Chief, Division of Traffic,
   Indiana State Highway Commission
STATE AND LOCAL SAFETY PROGRAM.................... 57
   Robert S. Whitehead, Chairman,
   Indiana State Highway Commission
JOINT HIGHWAY GOALS, COUNTY AND STATE ...... 65
   James F. Mummey, Assistant Division Engineer,
   Bureau of Public Roads, Indiana Division
REMARKS ON HIGHWAY BEAUTIFICATION ACT
   OF 1965.............................................................................................. 71
   J. P. Moss, President, Moss-Thompson Company, Inc.,
   Leeds, Alabama
PURPOSE AND OBJECTIVES OF THE INDIANA
   HIGHWAY NEEDS STUDY............................................................... 73
   A. J. Proctor, Executive Director,
   Highway Needs Study Committee
CONDUCT AND PROGRESS OF THE INDIANA
   HIGHWAY NEED STUDY............................................................... 76
   Reed H. Winslow, Project Director,
   Cole and Williams Engineering
USE OF EXPECTED RESULTS OF THE INDIANA
HIGHWAY NEEDS STUDY................................................ 79
Senator Robert E. Peterson, Highway Needs Study Committee

USE OF EXPECTED RESULTS OF THE INDIANA
HIGHWAY NEEDS STUDY............................................. 82
Senator Charles M. Maddox,
Highway Needs Study Committee

THE INDIANA HIGHWAY NEEDS STUDY—
QUESTIONS AND ANSWERS........................................ 85
Panel, A. J. Proctor, R. H. Winslow, R. E. Peterson,
C. M. Maddox

RESEARCH AND TRAINING CENTER FOR INDIANA
STATE HIGHWAY COMMISSION...................................... 88
F. B. Mendenhall, Assistant Chief Engineer,
Technical Services, Indiana State Highway Commission

THE NEED FOR UNIFORMITY........................................ 91
Harold L. Michael, Associate Director,
Joint Highway Research Project, Purdue University

PLANNING AND ORGANIZING FOR EMERGENCY
SNOW CLEARANCE AND TRAFFIC ROUTING.................. 97
Arthur G. Wake, P.E., Director,
Bureau of Traffic Engineering, City of Indianapolis, Indiana

UTILITY CUTS AND TRAFFIC OPERATIONS............... 107
Thomas C. Conley, P.E., City Civil Engineer,
Indianapolis, Indiana

FORMULATION OF A TECHNIQUE FOR EVALUATING URBAN HIGHWAY NEEDS......... 112
R. G. Rude, Research Assistant, J. C. Oppenlander, Research Engineer, Joint Highway Research Project, Purdue University

EFFECTS OF A CHANGE IN THE CONTROL DEVICE
ON INTERSECTION ACCIDENTS.................................... 138
G. W. Schoene, Graduate Assistant, H. L. Michael, Associate Director, Joint Highway Research Project, Purdue University

EVALUATION OF DELAYS AND ACCIDENTS AT INTERSECTIONS FOR MEDIAN LANE CONSTRUCTION 156
Robert B. Shaw, Research Assistant, Harold L. Michael,
Associate Director, Joint Highway Research Project,
Purdue University

SCHEDULING TRAFFIC SIGNAL MAINTENANCE...... 180
Thorold G. Smith, Research Assistant, J. C. Oppenlander,
Research Engineer, Joint Highway Research Project,
Purdue University
THE INDIANA DRAINAGE CODE—
A RESPONSIBILITY OF COUNTY GOVERNMENT........ 220
   Senator Wilbur E. Newlin,
   State Senator, Hendricks and Morgan Counties

BUDGETING FOR COUNTY DRAINAGE BOARD OPERATIONS
   ................................................................. 223
   Carleton Phillippi, Director of Field Representatives
   State Board of Tax Commissioners

DRAINAGE FUNDS—THEIR APPLICATION,
ACCOUNTING AND ADMINISTRATION ....................... 229
   Henry Chopson, Supervisor, State Board of Accounts

ASSESSING COSTS AND BENEFITS ON COUNTY DRAINAGE PROJECTS
   ................................................................. 237
   Carl M. Anderson, Boone County Surveyor

ORGANIZING A COUNTY HIGHWAY SIGN CREW...... 252
   Harold Porter, Highway Supervisor,
   Wells County Highway Department

REPLACEMENT, SERVICE AND REPAIR OF COUNTY HIGHWAY EQUIPMENT
   ................................................................. 256
   Roy Shrote, Highway Supervisor,
   Vanderburgh County Highway Department