

CONTENTS

| | |
|---|-----|
| Finite Element Analysis of Pile-Supported Pavement Structures <i>by Raman Pichumani, John E. Crawford, and George E. Triandafilidis</i> (Highway Division) | 293 |
| New Directions and Techniques in Highway Location Planning <i>by Stanley L. Peters</i> (Highway Division) | 305 |
| User-Optimized Traffic Assignment <i>by Frank J. Hatfield</i> (Highway Division) | 313 |
| Computer Model for Highway Noise Prediction <i>by Kenneth E. Nelson and Joseph L. Schofer</i> (Highway Division) | 325 |
| BART in Operation—Innovations in Rapid Transit <i>by William A. Bugge</i> (Urban Transportation Division) | 335 |
| Reappraising Metropolitan Transportation Needs <i>by Thomas F. Humphrey</i> (Highway Division) | 353 |
| Synthetic Through Trip Patterns <i>by David G. Modlin, Jr.</i> (Urban Transportation Division) | 363 |

→

This Journal is published quarterly by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, N.Y. 10017. Address all ASCE correspondence to the Editorial and General Offices at 345 East 47th Street, New York, N.Y. 10017. Allow six weeks for change of address to become effective. Subscription price to members is \$4.00. Nonmember subscriptions available; prices obtainable on request. Second-class postage paid at New York, N.Y. and at additional mailing offices. IR, TE, WW.

The Society is not responsible for any statement made or opinion expressed in its publications.

| | |
|---|-----|
| Need for Estimated Cement Requirements for Stabilizing Lateritic Soils by <i>Samuel A. Ola</i> (Highway Division) | 379 |
| Highway Noise and Acoustical Buffer Zones by <i>Asadullah Zulfacar and C. Scott Clark</i> (Urban Transportation Division) | 389 |
| Finite Element Analysis of Slabs on Elastic Solids by <i>Yang H. Huang</i> (Highway Division) | 403 |
| Incorporating Highway Safety into Level of Service by <i>Walter J. Diewald</i> (Highway Division) | 417 |
| Predicting Pavement Performance by <i>Robert E. Boyer and Milton E. Harr</i> (Highway Division) | 431 |
| Optimizing Bus Use of Urban Highways by <i>Herbert S. Levinson and William F. Hoey</i> (Urban Transportation Division) | 443 |
| Transportation Planning for Urban School Systems by <i>Patrick R. Pickens and John M. Tyler</i> (Urban Transportation Division) | 461 |
| Railroad Freight Movement—Some New Concepts and Current Plans by <i>George A. Sargent</i> (Urban Transportation Division) | 475 |
| Prestressed Cryogenic Pipelines by <i>Marvin B. Gardner, Jr.</i> (Pipeline Division) | 489 |
| Evaluation of Airfield Performance by Simulation by <i>Austin E. Brant, Jr. and Patrick J. McAward, Jr.</i> (Air Transport Division) | 505 |

DISCUSSION

Proc. Paper 10508

| | |
|--|-----|
| Settlement of Pipeline on Thawing Permafrost, by Andrew C. Palmer (Aug., 1972. Prior Discussion: May, 1974). <i>closure</i> | 525 |
|--|-----|

| | |
|---|-----|
| Computer Simulation of Waterhammer Effects , by George Belonogoff (Aug., 1972. Prior Discussion: Aug., 1973). | |
| <i>closure</i> | 526 |
| Cost Estimating Model for Rural Interstate Highways , by John Whitman and Frederick J. Wegmann (Aug., 1972. Prior Discussion: Aug., 1973). | |
| <i>closure</i> | 526 |
| Local Rural Road Costs and Economies of Scale , by William D. Berg (Nov., 1972. Prior Discussion: Aug., 1973). | |
| <i>closure</i> | 527 |
| Current Methods for Improved Tire-Pavement Interaction , by Bob M. Gallaway and Jon A. Epps (Nov., 1972. Prior Discussion: Aug., 1973). | |
| <i>closure</i> | 527 |
| Parameters of Rational Airfield Pavement Design System , by W. Ronald Hudson and Thomas W. Kennedy (May, 1973). | |
| <i>errata</i> | 528 |
| Subgrade Strengthening of Existing Airfield Runways , by Quentin L. Robnett (May, 1973). | |
| <i>errata</i> | 529 |
| Parking Facility Layout: Level-of-Service Approach , by Jason C. Yu and Alexander R. Lincoln (May, 1973). | |
| <i>errata</i> | 529 |
| Investing in Regional Highway Networks , ^a by Leon D. Chapman (May, 1973). | |
| <i>by Richard de Neufville</i> | 529 |
| Effect of Environment on Rapid Transit Construction , ^a by George O. Kline (May, 1973). | |
| <i>by T. Karl Taylor</i> | 531 |
| Planning Criteria for Bikeways , ^a by Vincent R. Desimone (Aug., 1973). | |
| <i>by Gnanadesikam Ramanujam</i> | 533 |

^aDiscussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.

TECHNICAL NOTES

Proc. Paper 10511

Analysis of Symmetrically Loaded Slab on Elastic Solid

by Yang H. Huang

(Highway Division) 537

INFORMATION RETRIEVAL

The key words, abstract, and reference "cards" for each article in this Journal represent part of the ASCE participation in the EJC information retrieval plan. The retrieval data are placed herein so that each can be cut out, placed on a 3 × 5 card and given an accession number for the user's file. The accession number is then entered on key word cards so that the user can subsequently match key words to choose the articles he wishes. Details of this program were given in an August, 1962 article in CIVIL ENGINEERING, reprints of which are available on request to ASCE headquarters.