The Joint Transportation Research Program & Purdue Library Publishing Services

Presentation at the March 2011 Road School
West Lafayette, Indiana

Paul Bracke
Associate Dean, Purdue University Libraries

Mark Newton
Assistant Professor, Purdue University Libraries

Charles Watkinson
Director, Purdue University Press
Technical Report Publishing
(the old way)
Moving to Digital JTRP Reports

• Looking at the library’s collection today
• Looking Backward: Building a Retrospective Archive of JTRP Reports
• Looking Forward: Establishing Publishing Procedures for New Reports
Technical Reports from 2008

FHWA/IN/JTRP-2008/06, Assessment of Axially-Loaded Pile Dynamic Design Methods and Review of INDOT Axially-Loaded Design Procedure, Dimitrios Loukidis, Rodrigo Salgado, and Grace Abou-Jaoude


FHWA/IN/JTRP-2008/11, Earthquake Resistance of Integral Bridges, Robert J. Frosch, Michael E. Kreger, and Aaron M. Talbott

FHWA/IN/JTRP-2008/12, Performance-Based Contracting for Highway Preservation and Maintenance, Bob G. McCullouch, Kumares C. Sinha, and Panagiotis Anastasopoulos Anastasopoulos

http://docs.lib.purdue.edu/jtrp/
Evaluation of the Cost-Effectiveness of Pavement Surface Maintenance Activities

Ibrahim Moussa Mouaket
Abdullah Al-Mansour
Kumares C. Sinha

Date of Submission
1-1-1990

Report Number
FHWA/IN/JHRP-90/12

Keywords
cost-effectiveness evaluation, surface routine maintenance, chip and sand
seal coating, life cycle costing

Abstract
This study covers pavement surface maintenance on three surface types:
rigid, flexible and composite (asphalt overlay on rigid pavement). It
addresses 3 main issues as follows: 1) Do routine maintenance activities
make a difference in terms of pavement serviceability? If yes, how much? 2)
Uploading Reports
Title: Life and Cost Comparison of Three Rehabilitation Techniques on I-65 Between SR-2 and SR-114

Authors: Sedat Gulen, John Weaver, Samy Noureldin

Last Event: Revision uploaded (Mon Jan 4 2010)

Waiting for Administrator: No

Locked by Administrator: No

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Manuscript: #1820

PDF

Download: PDF (title page added) (12/23/2009), 1.5 MB

preflight version: 2009-12-23 13:49:03

read PDF modified for publication (force regeneration)

Important Dates:

Submitted: December 23, 2009

Sort Year (Grant Year): 2004

Type:

Abstract:

Construction of hot mix asphalt (HMA) overlays on top of old concrete pavements is the most common concrete pavement rehabilitation strategy. These overlays, however, are usually subject to reflection cracking related to the movement of the old concrete slab. In addition, these overlays may also be vulnerable to rutting when subjected to large traffic volumes of trucks. Concrete overlays have the advantage of being rut resistant compared to HMA overlays. However, the current national experience of the performance of these overlays is still relatively limited compared to HMA overlays. In addition, doubts are often raised about the cost effectiveness of these overlays, the ease of their rehabilitation at the end of their design life and the period of time required closing the road to traffic for ongoing and post construction operations.

This report presents an evaluation of three concrete pavement rehabilitation techniques employed on interstate highway I – 65;
JTRP Report Usage

• Download statistics are COUNTER compliant (publishing industry standard)
• 360 reports in the current collection
• Nearly 160,000 downloads since October 2006 (7.9% of all downloads)
• Top document downloaded over 7,900 times
• Median of 290 downloads per report
• 30 reports with over 1,000 downloads
• Over 100 with over 500 downloads
Google Analytics -> Global Access
Access in Indiana
# Google Analytics / Traffic Sources

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A Tarko, M Kanodia - 1998 - docs.lib.purdue.edu
Page 1. Civil Engineering Joint Transportation Research Program Purdue Libraries Year 2004 Hazard Elimination Program - Manual ... School of Civil Engineering Purdue University Joint Transportation Research Program Project No. C-36-59GG File No. 8-5-33 SPR-2485 ... All 2 versions

[PDF] Joint Transportation Research Program
E Sotelino, A Asgari, A Saksa, G Cedeno - 2005 - docs.lib.purdue.edu
Page 1. Civil Engineering Joint Transportation Research Program Purdue Libraries Year 2005 ... Purdue University Joint Transportation Research Program School of Civil Engineering West Lafayette, IN 47907-1284 Phone: (765) 494-9310 Fax: (765) 496-7996 Page 5. ... Cited by 740 - Related articles - Cached - All 2 versions

A model for the mechanics of jointed rocks
RE Goodman, RL Taylor, TL Brekke - J. of Soil Mechanics and ... 1968 - pubsindex.trb.org ... Behavior; Classification; Deformation curve; Discontinuity (Geology); Failure; Finite element method; Finite elements; Joint; Jointing of rock; Joints (Engineering); Mathematical models; Matrices (Mathematics); Mechanics; Models ... Transportation Research Board. ... Cited by 48 - Related articles - Cached - All 2 versions

Transit-oriented development and joint development in the United States: A literature review
R Cervero, C Ferrell, S Murphy - ... , DC: Transportation Research ... 2002 - pubsindex.trb.org ... Oriented Development: State of the Practice and Future Benefits." This digest provides definitions of transit-oriented development (TOD) and transit joint development (TJD ... TCRP Research Results Digest Issue Number: 52 more icon Publisher: Transportation Research Board. ...

Sources, Measurements, and Effects of Segregated Hot Mix Asphalt Pavement
RC Williams, G Duncan, T White - ... Transportation Research ... 1996 - docs.lib.purdue.edu
There are several factors that lead to segregation. Segregation can occur during stockpiling and handling of aggregate and during mixing, storage, transport and lay down of the asphalt mixture. Sometimes segregation may result from a single source or from a combination of ...
Looking Backward
Why Digitize?

• Enhance *access* to important resources
  – Accessible wherever there is a web browser and internet connection
  – Integrated into research collections and search engines (e.g., Google Scholar)

• *Preservation* of at-risk materials
  – Create digital surrogates for materials
  – Reduce handling and wear & tear on print
Steps Toward Digital Collections

Metadata and Indexing → Scanning → Dissemination
Metadata and Indexing

• Descriptive information about each individual report
  – Author(s), Title, Report Number, Data of Publication, Keywords, etc.
• Enhances findability of reports
• DOIs
• Name Authority
DOIs

- DOI = Digital Object Identifier
- Publishing industry standard for creating unique, persistent identifiers for content
- Used for:
  - Citation doi:10.3141/1634-17
  - Persistent link (http://dx.doi.org/10.3141/1634-17)
  - Dynamically linking content
Name Authority

• Practice of using consistent forms of names in indexing
• Allows for consistent retrieval of all works by an author
• For example:
  – John Smith, John M. Smith, J. Smith, JM Smith
  – Selecting one form and consistently using it enables consistent retrieval
Metadata and Indexing Steps

Verify and update existing database
- Migrating existing metadata, filling in gaps
- Assign DOIs
- Name authorities clean-up for authors

Export for Loading
- Purdue e-Pubs
- External Research Databases (HathiTrust, Internet Archive, Google Books, etc.)

Subject Analysis (After the fact)
- Map JTRP Classification Scheme to DC-based metadata
Scanning

• Scanned to archival standards, following best practices for long-term preservation
  – High resolution TIFF master
    (Preservation, Print-on-Demand)
  – Converted to PDF for dissemination
• All scans go through OCR to generate full-text transcript and enable full-text search
• Issues:
  – Paper Quality
  – Print Quality
  – Photographic Inserts
  – Oversized Inserts (e.g., maps)
Scanning and Loading

Scan Reports
- Scan, at minimum, print-only reports

Post-Processing
- Save master copies to distributed dark storage, gold DVDs for preservation
- Generate access PDFs
- OCR

Loading
- Batch loading into Purdue e-Pubs
Dissemination

• JTRP Reports would be available to the public
  – As a browsable and searchable collection in Purdue e-Pubs
  – Through Google Scholar

• They could also be made available
  – Transparently through the JTRP website, or other websites
  – In other research databases (e.g., Internet Archive, HathiTrust)
  – As print-on-demand through Amazon
Looking Forward
Publishing Workflow

Submission
- Author submits draft final manuscript online, signing a license agreement and entering metadata about the manuscript

Review
- The manuscript goes through a review process, monitored by the JTRP Production Editor
- The author gets feedback, makes corrections, and resubmits the final manuscript

Production
- The Production Editor does quality assurance of image and text
- The Production Editor writes an abstract ("Amazon blurb") in less technical language
- The Production Editor packages manuscript for final publication – online and in other formats
Submission

JOIN TRANSPORTATION RESEARCH PROGRAM

Follow the instructions below to upload your draft final report to the Joint Transportation Research Program.

Before you begin, please be sure you have the following information at hand:
- The draft final report in an editable file format (e.g., Microsoft Word)
- A Technical Summary (Word template available here)
- The project title
- The full names and institutional affiliations of the authors
- An abstract of about 250 words
- A list of descriptive keywords
- The project SPR number

The upload process consists of the following steps:
1. Read and accept the Purdue Libraries license agreement below
2. Enter information collected in the steps above
3. Upload your draft final report, technical summary, and any supplementary documentation
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Production

- The Production Editor is a member of Purdue University Press – a publishing professional
- No copyediting or design needed, but quality assurance
- Translating technical language into a more readable abstract
- Allocating identifiers – not only DOIs but also ISBNs
- Submitting to Abstracting and Indexing services (including TRB Publications Index)
- Producing publicity materials and e-mail alerts
- Making reports available in the formats users want
Citizen Band (CB) Radio Communication Commenting on Indiana State Police Enforcement Activity

Alex M. Haine, Purdue University
Steve M. Remias, Purdue University
George H. Goble, Purdue University
Jason S. Wasson, Indiana Department of Transportation
Darcy M. Bullock, Purdue University

Persistent Identifier
doi:10.4231/5dc9v.12682868753124

Abstract
This audio was recorded from Citizen Band (CB) radio traffic on Channel 19 adjacent to mile marker 127.8 on I-65 in Indiana (Latitude 39.918554, Longitude -86.329367). The audio recording represents selected transmissions recorded at approximately 9:30am on 21 July 2010 documenting the public perception of an Indiana State Police enforcement detail that was occurring along I-65 and I-865 in Boone and Marion County. Approximately 12 different Indiana State Police personnel were involved in the enforcement detail at the time of the recording.

Date of this Version
7-21-2010
“For Fee” Availability in Print
Print-on-Demand for users who still want hard copies
What we can deliver

• **Efficiency:** Comprehensive and persistent access to past reports and a platform for creating and delivering new reports
  – Scanning and Indexing older reports
  – Implementing publishing workflows in Purdue e-Pubs for new reports

• **Impact:** Increased, measurable exposure for JTRP reports by
  – Providing exposure in venues ranging from Google Scholar to Amazon.com
  – Integrating with publishing industry infrastructure through the use of ISBNs and DOIs
Thank You

Questions?

Project Contact:
Mark Newton, newton@purdue.edu