

ISSN: 2160-0473

Volume 14, Number 2, April 2024



Journal of Transportation Technologies



ISSN: 2160-0473



<https://www.scirp.org/journal/jtts>

Journal Editorial Board

ISSN 2160-0473 (Print) ISSN 2160-0481 (Online)

<https://www.scirp.org/journal/jtts>

Editor-in-Chief

Prof. Khaled Abdelazim Abbas

Transport Planning & Traffic Engineering House, Egypt

Editorial Board

Dr. Theo Arentze

Eindhoven University of Technology, Netherlands

Prof. Shuming Chen

Jilin University, China

Prof. Torbjörn Falkmer

Curtin University, Australia

Dr. Ranjit Godavarthy

North Dakota State University, USA

Dr. Essam H. Almasri

University of Gaza (IUG), Palestine

Prof. Antoine Hobeika

Virginia Polytechnic Institute and State University, USA

Dr. Xinguo Jiang

Southwest Jiaotong University, China

Dr. Felipe Jiménez

Universidad Politécnica de Madrid, Spain

Dr. Jungwook Jun

Virginia Department of Transportation, USA

Prof. Seungmo Kang

Korea University, South Korea

Prof. Jerzy Kisilowski

Kazimierz Pulaski University of Technology and Humanities in Radom,
Poland

Dr. Pan Lu

North Dakota State University, USA

Prof. Srinivas S. Pulugurtha

The University of North Carolina at Charlotte, USA

Dr. Joaquin Rodriguez

French Institute for Sciences and Technologies of Transport,
Planning and Networks, France

Dr. Adel W. Sadek

University at Buffalo, The State University of New York, USA

Dr. Hualiang Teng

University of Nevada, USA

Prof. Harry J. P. Timmermans

Eindhoven University of Technology, Netherlands

Dr. Rafael Toledo-Moreo

Technical University of Cartagena, Spain

Prof. Dario Vangi

Florence University, Italy

Dr. Achmad Wicaksono

Universitas Brawijaya, Indonesia

Prof. Saffet Yagiz

Nazarbayev University, Kazakhstan

Prof. Lixing Yang

Beijing Jiaotong University, China

Dr. Ruifeng Yu

Tsinghua University, China

Table of Contents

Volume 14 Number 2

April 2024

Remaining Useful Life Prediction of Rail Based on Improved Pulse Separable Convolution Enhanced Transformer Encoder

Z. M. Wang, M. Li, J. He, J. H. Liu, L. Jia..... 137

Exploring University Campus Community's Perceptions and Barriers toward Biking: A Case Study of the University of Tennessee Knoxville

S. M. Usman, M. Adeel 161

Evaluation of the Impact of Driver Behavior on Back of Queues Events in Work Zones Using the SHRP2 Naturalistic Driving Study Data

S. Hallmark, G. Basulto-Elias, N. Oneyar, O. Smadi..... 179

Intermodal Competition: Cargo Airships versus Long-Haul Trucking for Perishable Commodities

B. E. Prentice..... 195

Research on Track Fastener Service Status Detection Based on Improved YOLOv4 Model

J. He, W. Q. Wang, N. P. Yang 212

Measuring Pedestrian Stress Response (MPSR) Using Wearable Technologies

I. Dash, R. A. Muscatello, M. D. Abkowitz, E. R. Mostoller, M. Sewell 224

Modeling Expected Failure Considering Repair Time and Degradation: A Rail System Case Study

M. Hamidi, A. Sedaghat, A. Gharehgozl, F. Szidarovszky 236

Urban Freight Consolidation Model for Post-Hauler Planning

M. A. Rahman..... 255

Journal of Transportation Technologies (JTTs)

Journal Information

SUBSCRIPTIONS

The *Journal of Transportation Technologies* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$79 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2024 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

Copyright for individual papers of the journal:

Copyright © 2024 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jttts@scirp.org



Call for Papers

Journal of Transportation Technologies (JTTs)

ISSN 2160-0473 (Print) ISSN 2160-0481 (Online)
<https://www.scirp.org/journal/jtts>

Journal of Transportation Technologies (JTTs) is an international refereed journal dedicated to the latest advancement of transportation technologies. The goal of this journal is to provide a forum for scientists and academicians worldwide to promote, share, and discuss various new issues and perspectives in diverse areas of transportation technologies, and to keep a record of the state-of-the-art research in the areas.

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following topics:

Advanced Driver Assistance Systems
Advanced Emergency Management Systems (AEMS)
Advanced Materials for Transportation Vehicles
Advanced Traffic Management Systems (ATMS)
Automated Baggage Handling and Screening Systems
Automated People Movers
Automatic Vehicle Location and Tracking
Automotive Software Architecture
Bus Transit Systems
Collision Avoidance Systems
Command Control Centres
Communication, Navigation, Surveillance Systems
Computer-Aided Dispatch
Devices to Enhance Pedestrian and Bicyclist Safety
Dynamic Traffic Signal Control
Electronic Fare Collection
Flight Information Display Systems
Health and Wellness in Transportation Industry
Incident Reporting Packages
Intelligent Security Systems
Intelligent Transportation Systems and Traffic Control
Intelligent Vehicles
ITS Architecture
ITS as Decision Support System
Location-Based Services
Marine Communication and Navigation Engineering

Maritime Transport Management
Metro-Rail Transportation
Mobile Terminal Displays
Navigation Technology
On-Board Diagnosis
Operational Control Centres
Pedestrian and Vehicle Detection Technologies
Planning and Scheduling Software Packages
Powertrain Management
Railway Tunnels and Tunneling
Railways Management
Smart Card Reader
Socio-Economical Effect of Environmental Friendly Mobility
Sustainable Transport Safety Management
Testing Methodology
Traffic Control Devices
Traffic Psychology
Traffic Signal Priority System
Transport Management
Transport Safety
Travelers' In-Vehicle and Out-of-Vehicle Information Systems
V2I/V2V Communication
Variable Message Signing
Vehicle Navigation System
Vehicle-to-Roadside Communication (VRC)
Weigh-in-Motion (WIM)

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<https://www.scirp.org/journal/jtts>

E-mail: jtts@scirp.org