

2022 10th International Conference on Traffic and Logistic Engineering (ICTLE 2022)

**Virtual Conference
12 – 14 August 2022**



**IEEE Catalog Number: CFP22AU7-POD
ISBN: 978-1-6654-8631-6**

**Copyright © 2022 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP22AU7-POD
ISBN (Print-On-Demand):	978-1-6654-8631-6
ISBN (Online):	978-1-6654-8630-9

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

2022 10th International Conference on Traffic and Logistic Engineering-(ICTLE 2022)

Preface	vi
Committees.....	vii

✧ **Transportation Network Planning and Infrastructure**

Predicting the Scale of the Rural Road Network under the Strategy of Rural Revitalization in China	1
<i>Di Wu, Xu Ji</i>	
Research on the Current Status and Trend of Transit Vessels in the Northern Sea Route	6
<i>Juanjuan Xiao, Jinfen Zhang, Di Zhang, Da Wu</i>	
Path Optimization of Stacker in Automated Storage and Retrieval System with Split-Pallet Task	12
<i>Heng Zhang, Fa Zhang</i>	
Using GIS-Based Spatial Analysis: Comparing Pattern of Urbanization and Transportation Networks	17
<i>Jirattikan Ammapa, Pisinee Visuttiporn, Jirawan Klaylee, Sararad Chayphong, Pawinee lamtrakul</i>	
A Dynamic Diagnose on Bus Routes Optimization Using AHP Based on Multi-Source Bus Data.....	22
<i>Xin Zhou</i>	
Research on International Benchmarking of Building China's Transport Power.....	28
<i>Meiying Sang, Jiayu Chen, Jian Zhou, Ping Xu</i>	

✧ **Traffic Safety and Management**

Identification of Suburban Motorcycle Traffic Accident Hotspots Using GIS-Based Spatial Analysis.....	35
<i>Jirawan Klaylee, Pawinee lamtrakul, Virach Sornlertlamvanich</i>	
Hybrid Model to Predict the Arrival Time at Tollgate of Vehicles on Expressway.....	41
<i>Quynh Thi Nhu Phan, Manik Mondal, Sano Kazushi</i>	
Analysis of Highway Speed Limit Adjustment Based on Risk Assessment Technology.....	46
<i>Le Mai, Ye Song, Rui Wang, Zhibiao Peng, Luwuxia Zhang</i>	
Quantitative Analysis of Oversaturation Degree Based on Vehicle Formation	51
<i>Bingsheng Huang, Xingwang Jiao, Yin Zhao, Linlong Lei</i>	

Media and Trust Influence Consumers' Acceptance of Self-driving Cars	57
<i>Ruixin Du, Huiying Du, Jia Wu</i>	
Application of Crossed Impacts to Obtain Risk Indices for Stock Management	62
<i>Gustavo Sánchez García, Santiago Omar Caballero</i>	
Research on Evaluation of Adaptability between Transport Capacity and Passenger Flow Demand in Urban Rail Transit	66
<i>Tian Wanqi</i>	
Model Predictive Control Method of Separating Trucks from Passenger Vehicles at Freeway.....	73
<i>Lei He, Jie Li, Xu Qu, Yikang Rui</i>	
Transit Signal Priority Control with Deep Reinforcement Learning	78
<i>H. K. Cheng, K. P. Kou, K. I. Wong</i>	
Traffic Signal Control Method Based on Modified Proximal Policy Optimization	83
<i>Yaohui An, Jing Zhang</i>	
Study on the Influence of Driving Fatigue on Drivers' Effective Reaction Time	89
<i>Zuoying Zhang</i>	
Modifying Value Stream Mapping for the Early Integration of RFID into the Factory Planning Process	95
<i>Christian Looschen, Maximilian Bachmann, Johannes Fottner</i>	
✧ Logistics and Urban Distribution	
Identifying sustainable Roll-on/ Roll-off Seaport Assessment Criteria using the Fuzzy Delphi Method: A Case Study of Thailand	101
<i>Ratima Jaidee, Detcharat Sumrit, Assadej Vanichchinchai</i>	
Spatial Point Pattern Analysis of Inbound Logistics Activities Based on GPS Trajectory Data	107
<i>Ao Lv, Baofeng Sun, Yu Sun, Chengyan Yang</i>	
The Logistics Model Selection of the Green Sharing Standardized Crates for Agricultural Products based on the DCE Methodology	112
<i>Jiarong Wang, Wei Liu, Chuxin Chen, Haoxin Guo</i>	
Applying Kano Model to Study Logistics Service Attributes: A Case Study of a Rubber Tires Company....	117
<i>Yaninee Tharathongun, Detcharat Sumrit, Assadej Vanichchinchai, Piyanoot Sumrith</i>	
What Makes Port Operational Efficiency Varies Among Regions in China? —— In the perspective of China's six major ports	122
<i>Zhuangcun Chen</i>	

Inventory Management for Consumer Products: A Distribution Center in Thailand	128
<i>Kanogkan Leerojanaprapa, Komn Bhundarak, Walailak Atthirawong, Kittiwat Sirikasemsuk</i>	
Comprehensive Development Evaluation of Main Inland Ports on the Yangtze River.....	134
<i>Haolin Wang</i>	
Research on Cargo Loading Strategy of Container Ship Based on Bacterial Foraging Algorithm.....	139
<i>You Tian Zhang</i>	
Impact of Green Efforts on Channel Structure of Green Supply Chain.....	145
<i>Weiqing Lin, Shilun Li, Yongyan Shi, Feng Lin</i>	
Research on the Evaluation of the Integration Level of Emergency Logistics in the Yangtze River Delta Region.....	150
<i>Luan Su, Rui Huang, Yunjian Jiang</i>	
Research on Supply Chain Network Equilibrium Considering Big Data Business Investment	160
<i>Qiankun Wang, Heyin Hou</i>	
.....	Author Index