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## Editorial

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**Biographical notes:** Dawna L. Rhoades is currently the Chair of the Department of Management, Marketing, and Operations and the former Associate Dean for Research and Graduate Studies in the College of Business at Embry-Riddle Aeronautical University in Daytona Beach, Florida. Her research interests include airline strategy, NextGen systems, commercial space operations, and intermodal and sustainable transportation. Her work has appeared in such journals as the *Journal of Air Transport Management*, *Journal of Managerial Issues*, *Managing Service Quality*, *World Review of Science, Technology, and Sustainable Development* and the *Handbook of Airline Strategy*. She is the author of *Evolution of International Aviation: Phoenix Rising*, 3rd edition (2014) and the Editor of the *World Review of Intermodal Transportation Research (WRITR)*.

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This special issue was proposed to give voice to a new generation of researchers in the fields of transportation, logistics, and supply chain management. The future is likely to present them with many exciting challenges and perplexing problems. The ICT revolution continues to hold great promise for new and better ways to collect, manage, and manipulate data to improve inventory, warehousing, supply chain efficiency, and intelligent transportation. Innovations in alternative fuels as well as radical new concepts such as the hyperloop, unmanned vehicles, and commercial space transportation hold out the promise of faster, safer, and cleaner transportation of goods and people.

Of course, transportation does not occur in a vacuum. It is intricately linked to national and global economic development and is impacted by the same forces – political, social, and technological. Thus, wild swings in the price of oil, economic turmoil in China and Europe, conflicts in Eastern Europe and the Middle East, climate change with its heat waves, droughts, and floods, and challenges to safety and security will all shape the future of transportation and logistics. Transportation, particularly intermodal transportation, is especially sensitive to these challenges because it involves multiple modes of transportation that exhibit different types of networks, regulatory oversight, and vulnerabilities. In a world where supply chains are global in nature and individuals increasingly move across political jurisdictions, future researchers will have plenty of issues to study and resolve.

This issue provides a small glimpse into these issues. In the article ‘Automation in operations management through positive train control’, Smith examines ways that technology can be used to monitor and control train movement to improve the safety of train operations. As train speeds increase, such technology will become increasingly important. While the need for these systems may be clear, the cost, technological specifications, regulation, and training have not yet been established, hampering

deployment of the technologies. Technology, government involvement, and consumer acceptance is the subject of another paper in this issue, 'Electric vehicle household charging behaviour in Ireland and aims for a carbon neutral electric fleet by 2020'. Like many of the proposed alternative types of transportation, the deployment of the technology requires the development of the infrastructure to support it. In this case, the technology requires publically accessible charging points. Proper planning and investment is necessary to foster the level of consumer acceptance essential to move this technology from the early adopters to a broader audience. Infrastructure development is also important to the success of the land-bridge concept. Land-bridges are emerging as ways to bypass shipping routes for reasons of time, cost, congestion, or safety. This paper examines the issues in relationship to a proposed land-bridge across the Negrev desert to bypass the Suez Canal. Like existing land-bridges across the USA or Asia, key concerns are the quality and availability of transportation infrastructure as these impact the transit time, cost, and safety of goods shipped. While the future may well de-emphasise road transport, it will likely constitute a significant portion of the freight transport for years to come do to the flexibility of this mode, however, the use of unit trains could be incorporated into this mode of transport if issues of terminals and small volume shipments can be resolved. Behrends explores the barriers to integrating these two modes of transport from the perspective of the road haulers. Finally, Toivonen the important question of transportation regulation as it relates to cross-border activity. In order to provide safe and seamless global transportation, regulatory regimes need to be instituted to address transportation standards as well as insurance and liability issues.

In short, this issue highlights a range of issues that will face the researchers of tomorrow. It will be their work that helps to answer the many challenges to creating a safe, secure, and environmentally-friendly transportation system of the future.