

# 2022 Winter Newsletter

Source: University of Alberta

Welcome to the first installment of the Resilient and Sustainable Mobility and Evacuation (RESUME) Group Newsletter! This periodic publication will provide updates on recent research, current projects, and new additions to the RESUME Group.

## Latest Research

### **Willingness of Hurricane Irma Evacuees to Share Resources: a Multi-Modeling Approach (2022) – *Transportmetrica Part A: Transport Science***

In this research, we focus on the factors that influence sharing behaviour in a disaster using data collected from Hurricane Irma. While much of the paper discusses a multi-modeling approach, it also contains key policy recommendations, including developing a multi-resource assistance program that connects interested sharers with those who need transportation and sheltering resources the most.

Authors: Dr. Stephen D. Wong, Jacquelyn C. Broader, Dr. Joan L. Walker & Dr. Susan A. Shaheen

[Published Article](#) [Open Access](#)



Boat evacuations from flooding

Source: Don Becker, USGS, Public domain

### **Power Trips: Early Understanding of Preparedness and Travel Behavior During California Public Safety Power Shutoff Events (2022) – *Transportation Research Record***

When the power goes off, how do people travel? In this paper, we explore mobility patterns during recent public safety power shutoff (PSPS) events, which work to reduce wildfire risk in California. Increasingly, grid resilience is tied to transportation resilience. This research aims to get ahead of the challenges and jumpstart strategies for preparing communities.

Authors: Dr. Stephen D. Wong, Jacquelyn C. Broader, Dr. Susan A. Shaheen

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Wildfire near power lines

Source: Tim Williams, CC-BY

## Get Involved

Dr. Wong is actively involved as the research coordinator with the Committee on Disaster Response, Emergency Evacuations, and Business Continuity at the Transportation Research Board (TRB). Consider becoming a [friend of the committee](#) and following updates via the newly created [website for the committee](#).

Dr. Wong is also the co-chair of the new Young Member Council – Sustainability and Resilience (YMC – S&R) for young members (35 and under) at TRB. Please email the YMC – S&R account to get connected for networking, annual meeting development, and other programs ([ymcsustainabilityresilience@gmail.com](mailto:ymcsustainabilityresilience@gmail.com)).

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## Recent Addition

The RESUME Group is excited to welcome Thayanne Gabrielle Medeiros Ciríaco to the team! Coming from Universidade Federal de Alagoas – UFAL in Brazil, Thayanne brings a strong background in civil engineering and transportation planning to the Group. As a Master of Science student, Thayanne will be working on a thesis that assesses resilient transportation, resilience hubs, and access to and from key resources in disasters. She is passionate about promoting women in engineering, enjoys reading and gardening, and hopes to continue exploring cultural diversity around the world.



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## Featured Research from the RESUME Group

### **Developing Transportation Response Strategies for Wildfire Evacuations via an Empirically Supported Traffic Simulation of Berkeley, California – *Transportation Research Record***

To support resource-strapped agencies and jurisdictions in California, we developed and tested a series of transportation response strategies for wildfire evacuations. The policies in this paper can be directly integrated into emergency response and evacuation plans.

Authors: Dr. Bingyu Zhao and Dr. Stephen D. Wong

[Published Article](#) [Open Access](#)

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## Must-Reads from Others

### **Evacuation decision-making and behavior in wildfires: Past research, current challenges and a future research agenda (2021) – *Fire Safety Journal***

Dr. Erica Kuligowski at the Royal Melbourne Institute of Technology (RMIT) wrote a great roadmap for future research in wildfire evacuations that focuses on decision-making and human behaviour. Published in the Fire Safety Journal, the paper reviews current research and identifies multiple key gaps in the field. Check it out!

Author: Dr. Erica Kuligowski

[Published Article](#)