# R. Michael Robinson 1030 University Blvd, Suffolk, VA 23435 757-638-7010 rmrobins@odu.edu

# a. Professional Preparation

<u>Institution</u>	Major	Degree	Year
Old Dominion University, Norfolk, VA.	Modeling and Simulation	Ph.D.	2010
U.S. Navy Post-Graduate School, Monterey, CA.	Physics	M.S.	1987
United States Naval Academy, Annapolis, MD	Political Science	B.S.	1980
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# **b.** Appointments

2013-Present	Director, Center for Innovative Transportation Solutions, Old Dominion
	University (ODU), Suffolk, VA
2010-Present	Research Assistant Professor and Associate Professor, Virginia Modeling,
	Analysis, and Simulation Center (VMASC), ODU, Suffolk, VA
2004-2009	Senior Project Scientist, VMASC, ODU, Suffolk, VA
2005-2007	Director of Programs Advancement, VMASC, ODU, Suffolk, VA
1980-2003	Various assignments as nuclear submarine officer, US Navy, including two tours
	as commanding officer and management of multi-million dollar budgets for a
	broad range of areas, including research and development.

# c. Publications

(i) directly related publications

Collins, Andrew J., Erika Frydenlund, Terra Elzie, and R. Michael Robinson, Do Groups Matter? An Agent-based Modeling Approach to Pedestrian Egress, The Conference in Pedestrian and Evacuation Dynamics 2014 (PED2014), Delft, the Netherlands, Transportation Research Procedia Vol. 2 (2014) pp. 430–435.

Elzie, Terra, Erika Frydenlund, Andrew Collins, and R. Michael Robinson, "Conceptualizing Intra- and Inter-Group Dynamics within a Controlled Crowd Evacuation," Journal of emergency management (Weston, Mass.) 03/2015; 13(2):109-20. DOI: 10.5055/jem.2015.0224.

Elzie, Terra, Erika Frydenlund, Andrew J. Collins, and R. Michael Robinson, "Panic that Spreads: Sociobehavioral Contagion in Pedestrian Evacuations." Transportation Research Record: Journal of the Transportation Research Board, No. 2586, Transportation Research Board, Washington, D.C., 2016, pp. 1-8.

Frydenlund, Erika, Terra Elzie, Andrew J. Collins, and R. Michael Robinson, A Hybridized approach to validation: The role of sociological research methods in pedestrian modeling, The Conference in Pedestrian and Evacuation Dynamics 2014 (PED2014), Delft, the Netherlands, Transportation Research Procedia Vol. 2 (2014) 697-705.

Robinson, R. Michael and Asad Khattak. Evacuee Route Choice Decisions in a Dynamic Hurricane Evacuation Context. Transportation Research Record: Journal of the Transportation Research Board, No. 2312, Transportation Research Board, Washington, D.C., 2012, pp. 141–149.

# (ii) Up to five other significant publications

Collins, A. J., E. Frydenlund, R. M. Robinson and M. Cetin (2015). "Exploring a Toll Auction Mechanism Enabled By Vehicle-To-Infrastructure Technology." Transportation Research Record: Journal of the Transportation Research Board, No. 2530, pp. 106-113.

- Foytik, Peter and R. Michael Robinson, Weighting Critical Infrastructure Dependencies to Facilitate Evacuations, International Journal of Disaster Risk Reduction, sent for production 28 NOV 2017.
- Robinson, R. Michael and Asad Khattak. Selection of Source and Use of Traffic Information in Emergency Situations. Transportation Research Record: Journal of the Transportation Research Board, No. 2234, Transportation Research Board, Washington, D.C., 2011, pp. 71-78.
- Robinson, R. Michael and Asad Khattak. Route Change Decision-Making by Hurricane Evacuees Facing Congestion. Transportation Research Record: Journal of the Transportation Research Board, No. 2196, Transportation Research Board, Washington, D.C., 2010, pp. 168-175.

#### d. Synergistic Activities

Director, Virginia Cyber Alliance 2018-2020

Chair, Transportation Research Board Standing Committee on Emergency Evacuation (ABR30) Director, Center for Innovative Transportation Solutions, Old Dominion University

### e. Collaborators & Other Affiliations

### (i)Collaborators

Jun Duanmu, Clemson University (now at China National Chemical Corporation); A.J. Khattak, Department of Civil Engineering, University of Tennessee; Eugene Maina, Ph.D., Dallas/Ft. Worth International Airport; Camelia Ravanbakht, Ph.D., Hampton Roads Planning District Commission (now retired)

# (ii) Graduate and Postdoctoral Advisors

Asad J. Khattak, Ph.D. Department of Civil Engineering, University of Tennessee

### (iii) Thesis Advisor and Postgraduate Sponsor

- Anuar, Khairul (2012). "Integrating probe vehicles and stationary detector data to construct accurate cumulative curves to study bottlenecks" Master's Thesis, Batten College of Engineering, Old Dominion University, Norfolk, VA
- Elzie, Terra. Modeling, Simulation and Visualization Engineering, Ph.D. Dissertation, Ongoing
- Foytik, Peter (2013). "Development of a Genetic Algorithm to Calibrate Volume Delay Function Parameters" Master's Thesis, Batten College of Engineering, Old Dominion University, Norfolk, VA
- Jordan, Craig (2012). "Clearing Paths for Emergency Vehicles Using Shock Wave Theory and Vehicle-to-Vehicle" Master's Thesis, Batten College of Engineering, Old Dominion University, Norfolk, VA
- Wang, Xin (2012). "Spatial analysis of travel behavior and response to traveler information" Ph.D. dissertation, Civil and Environmental Engineering Batten College of Engineering, Old Dominion University, Norfolk, VA
- Zhang, Hongbing (2012). "Analysis of primary-secondary incident events on urban freeways" Ph.D. dissertation, Civil and Environmental Engineering Batten College of Engineering, Old Dominion University, Norfolk, VA

Mentored three MS students and three Ph.D. students, supervised two post-doctoral individuals