

CURRICULUM VITAE

Name Hana Naghawi

Academic Rank Professor

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Education

- Ph.D.** **2010, Doctor of Philosophy** (Civil Engineering) majoring in transportation engineering, Louisiana State University, Baton Rouge, Louisiana.
Dissertation Title: “Transit-Based Emergency Evacuation Modeling with Microscopic Simulation”
- M.Sc.** **1997, Master of Science** (Civil Engineering) majoring in highway and traffic engineering, University of Jordan, Amman, Jordan.
Thesis Title: “Effect of Vehicle Type on Traffic Flow Characteristics at Intersections”
- B.Sc.** **1994, Bachelor of Science** (Civil Engineering), University of Jordan, Amman, Jordan. **Graduation Project:** “Fuhays Bypass Road”

Professional Activities in the Last 10 Years

- 1- Professor, The University of Jordan, 2019-present
- 2- Associate Professor, The University of Jordan, 2015 – 2019
- 3- Assistant Professor, The University of Jordan, 2010 – 2015
- 4- Research Assistant, Louisiana State University, Civil Engineering Department, Baton Rouge, LA, 2007- 2010

Selected Published Research

JOURNALS

- Hadidi, T., Naghawi, H., Jadaan, Kh. (2020), ‘Unconventional Intersection Designs for Improving Traffic Operation Along Arterial Roads’, PeriodicaPolytechnica Transportation Engineering. Accepted, not assigned a volume yet.
- Atieh, A., Naghawi, H., Jadaan, Kh. (2020), ‘Analysis of the Speeding Behavior of Jordanian Drivers’, Resilience and Sustainable Transportation Systems. Pp 28-34.
- Zawawa, Gh., Naghawi, H. (2019), ‘Evaluation of the Operational Performance of Continuous Green T-Intersection under Different Levels of Congestion’, PeriodicaPolytechnica Transportation Engineering. Doi: <https://doi.org/10.3311/PPtr.14032>
- Idewu, W.; Chapiwat, P.; Naghawi, H. (2019), ‘Identifying Optimum Taper Lengths for Zipper Merging Application using Real Data and Microscopic Simulation’, Periodica Polytechnica Transportation Engineering. Doi: <https://doi.org/10.3311/PPtr.13044>
- Naghawi, H. (2019), ‘Analysis of young drivers’ safety in Jordan using the Quasi-Induced Exposure Method’, Advances in Transportation Studies. Vol. 47, No. 2, pp 111-124.

- Naghawi, H.; Alobeidyeen, A.; Abdel-Jaber, M. (2019), 'Econometric Modeling for International Passenger Air Travel Demand in Jordan', *Jordan Journal of Civil Engineering*. Vol. 13 No. 3.
- Naghawi, H.; Shattal, M.; Idewu, W. (2019), 'Application of AIMSUN Microscopic Simulation Model in Evaluating Side Friction Impacts on Traffic Stream Performance', *World Academy of Science, Engineering and Technology, International Science Index 145, International Journal of Transport and Vehicle Engineering*, 13(1), 10 - 15. doi.org/10.5281/zenodo.
- Naghawi, H., Bannoura, D., "Driving Behavior in Jordan: The Role of Age and Gender" (2019), *Jordan Journal of Civil Engineering*. Vol. 13 No.1.
- Alkloub, A.; Allouzi, R.; Naghawi, H. (2019) 'Numerical Nonlinear Buckling Analysis of Tapered Slender Reinforced Concrete Columns', *International Journal of Civil Engineering*, 1-14.
- Naghawi, H., "Negative Binomial Regression Model for Road Crash Severity Prediction" (2018), *Modern Applied Science*. Vol.12 No. 4, 38-48.
- Naghawi, H., Al-Ajarmeh, R., Allouzi, R., AlKlub, A., Masarwah, K., AL-Quraini, A., Abu-Sarhan, M., "Plastic Waste Utilization as Asphalt Binder Modifier in Asphalt Concrete Pavement ". *World Academy of Science, Engineering and Technology, International Science Index 137, International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering* (2018), 12(5), 557 - 562.
- Naghawi, H., Al Qataweh, B. and Al Louzi, R. "Evaluation of Automated Enforcement Program in Amman" (2018), *Periodica Polytechnica Transportation Engineering*. doi: <https://doi.org/10.3311/PPtr.10939>
- Naghawi, H. and Aldalain Sh., "Relative Crash Involvement Ratio Associated with Different Sources of Young Drivers' Distraction" (2018), *Modern Applied Science* vol.12 No. 5, 1-9.
- Naghawi, H., AlSoud, A. and AlHadidi, T. "The Possibility for Implementing the Superstreet Unconventional Intersection Design in Jordan" (2018), *Periodica Polytechnica Transportation Engineering*, 46(3), pp. 122-128. doi: <https://doi.org/10.3311/PPtr.11635>
- Idewu, W., Mazicioglu, D., Naghawi, H., "Determining Confusion for Traditional and Experimental Pedestrian Signals in Rural and Suburban Areas in the United States" (2018), *Modern Applied Science* vol.12 No. 9, 87-98.
- Naghawi, H., Jadaan, K. , Al-Louzi, R. , Hadidi, T. "Analysis of the Operational Performance of Three Unconventional Arterial Intersection Designs: Median U-Turn, Superstreet and Single Quadrant ". *World Academy of Science, Engineering and Technology, International Science Index 135, International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering* (2018), 12(3), 387 - 395.
- Allouzi, R., Alkloub, A., Naghawi, H., Al-Ajarmeh R., "Fracture Modeling of Concrete in Plain and Reinforced Concrete Members". *International Journal of Civil Engineering* (2018), 1-14.
- Naghawi, H., AlHadidi T., Alkilany O., and Alsharief A., "Utilizing Geographic Information System as a Tool for Pavement Management System" (2017), *International Journal of Applied Mathematics Electronics and Computers*.
- Naghawi H. and Wolshon B., "Operation of Multimodal Transport Systems During Regional Mass Evacuation" (2014), *The Canadian Journal for Civil Engineers* vol. 42 No. 2, 81-88

- Naghawi H., Idewu W. “Analyzing Delay and Queue Length using Microscopic Simulation for unconventional Intersection Design: The Superstreet” (2014), The South African Institution of Civil Engineers vol. 56 No. 1
- Naghawi, H., Hadidi, T., and Oran, E., “Noise Levels Around Queen Alia International Airport” (2014), Engineering Science and Technology: An International Journal Vol 4. No.6
- Naghawi, H., Samuel B. Cooper III, Yoonseok Chung, James J. Dillard, and Pradeep Rayaprolu “Foundation of a Pavement Management System for the City of Baton Rouge, Louisiana” (2014), Engineering Science and Technology: An International Journal Vol 4. No.6
- K. Jadaan, I. Al-Hyari, H. Naghawi, R. Ammourah and Z. Al Nabulsi. "Traffic Safety in Jordan: Magnitude, Cost and Potential Countermeasures." Journal of Traffic and Logistics, Vol.1, No.1. March 2013
- Naghawi H. and Wolshon B., “Performance of Traffic Networks During Multimodal Evacuations: Simulation-Based Assessment”, NATURAL HAZARDS REVIEW Journal, Vol. 13 No. 3 (2012). Also, it was presented at the 90th Transportation Research Board Annual Meeting, January, 2011.
- Naghawi H. "Using Geographic Information System in Analyzing Hospital Accessibility”, Jordan Journal of Civil Engineering., Vol. 6 No. 3 (Apr. 2012).
- Naghawi H. "Methodological Notes on Regional level Validation of Microscopic Traffic Simulation Model”, Jordan Journal of Civil Engineering, Vol. 6 No. 2 (Apr. 2012).
- Naghawi H. and Wolshon B., “Transit-Based Emergency Evacuation Simulation Modeling”, 2010, Journal of Transportation Safety & Security, Volume 2 Issue 2, 184

CONFERENCES

- AlNahas, A., Alsweis, M., Naghawi, H. “Unconventional Intersection Design of a Highly Congested Signalized Intersection in Jordan” 2019 7th International Conference on Traffic and Logistic Engineering (ICTLE 2019), Paris, France.
- Naghawi, H. (2017). Young Drivers’ Safety in Jordan. Transportation Research Board 96th annual meeting, Washington, DC., 2017.
- Jadaan, Kh., Al-Hyari, I., Naghawi, H., Ammourah R. and Al Nabulsi, Z. "Traffic Safety in Jordan: Magnitude, Cost and Potential Countermeasures" 2013 2ND International Conference on Traffic and Transportation Engineering (ICTTE 2013), Feb, 2013.
- Brian Wolshon, Thomas Montz, Hana Naghawi and Vinay Dixit. “Emergency Transportation Modeling for Evacuation Decision Support” 2012 TRF Annual Forum Preliminary Program.
- Naghawi H. and Wolshon B., “Operation of Multimodal Transport Systems During Regional Mass Evacuation”, presented at the 90th Transportation Research Board Annual Meeting, January, 2011.
- Jadaan Kh., Mustafa R. and Naghawi H., “Road Traffic Accidents in Jordan: Prediction and Potential Countermeasures” 2011 Traffic Safety Forum, University of Damman, Kingdom of Saudi Arabia.
- Naghawi H., “Transit-Based Emergency Evacuation Simulation Modeling” presented at National Evacuation Conference, New Orleans, LA, 2010.

- Naghawi H., “Transit-Based Emergency Evacuation Modeling with Microscopic Simulation” presented at Transportation Research Board, TRB 89th annual meeting, Washington, DC., 2010.
- Naghawi H., “Transit-Based Emergency Evacuation Modeling with Microscopic Simulation” Poster presentation at The Fourth Annual DHS University Network Summit, Washington, DC, 2010.
- “Evaluation of Transit-Based Evacuation Plan” poster presentation at the Severe Storm Prediction and Global Climate Impact in The Gulf Coast Conference, Education, and Evacuation from Disasters, Houston, TX, 2008.

RESEARCH REPORTS

1. Wolshon, B., J. Lefante, H. Naghawi, J. Renne, P. Haughey, and W. Dufour. (2008) Application of TRANSIMS for the Multimodal Microscale Simulation of the New Orleans Emergency Evacuation Plan, Draft Final Report, United States Department of Transportation, Federal Highway Administration, Washington, DC.
2. Jadaan, Kh., Naghawi, H. et al., "Evaluation of Public Transportation Services in Amman", Research Report, Ministry of Transport, 1998, Amman, Jordan.

Supervised Theses

- Driver Speeding: Attitudes and Motivation
- Level of Service and Traffic Safety Relationship at Signalized Intersections
- Operational Performance Analysis of Implementing Alternative Intersections on Urban Arterial Roads and Intersections
- Operational Performance Comparison between Roundabouts Controlled by Police Enforcement and Roundabouts Controlled by Metering Signals
- Regression Model for Estimating Average Annual Daily Traffic (AADT)
- Development of Safety Performance Functions for Urban Arterials in Jordan
- Development of Statistical Models for Crash Severity Prediction in Jordan
- Factors Affecting Young Drivers Safety in Jordan
- Evaluation of Airport Airside Facilities Using Simulation
- Pedestrian Safety at Urban Signalized Intersections
- Unconventional Intersection Designs for Improving Traffic Operation along Arterial Roads
- Modeling of Side Friction Impacts on Traffic Characteristics at Urban Highways and Intersections
- Evaluation and Comparison of six unconventional intersection designs
- The Feasibility and Implications of Converting the University of Jordan to a Car-Free Campus
- Application of Induced Exposure Method to compare Risk of Traffic Crashes among different types of Drivers under different Driver Distractions in Jordan
- Development of Macroscopic Fundamental Diagrams for Arterial Roads in Jordan
- Comparison of conventional and unconventional intersection designs using microscopic simulation
- Development of Passenger Car Equivalency Values at Urban Signalized Intersections
- Traffic Safety at Roundabouts: A Case Study in Amman
- Operational Evaluation of Roundabout Metering Signals
- Crash Reduction Associated with Red Light Camera and Automated Speed Enforcement in Amman

Editorial Boards Membership

- Editorial Board Periodica Polytechnica Transportation Engineering
- International Scientific Committee and Editorial Board on Civil & Environmental Engineering Journal.
- Scientific Committee member on 7th safety conference in Jordan
- International Scientific Committee Member International Conference on Aviation Engineering and Technology
- International Scientific Committee member in the International Conference on Rail Transportation
- TRB Committee member, ANB10(4), (Emergency Evacuation sub-committee)
- Advisory Board of 31 World Conference on Applied Science, Engineering, and Technology

Reviewing Activity

- Reviewer of the Transportation Research Board, Standing Committee on Transportation in the Developing Countries (ABE90), 2016, 2017
- Reviewer at American Journal of Civil Engineering and Architecture, 2016
- Reviewer at Journal of Traffic and Transportation Engineering (English Edition), 2016
- Reviewer of the Transportation Research Board, Standing Committee on Transportation in the Developing Countries (ABE90), 2015
- Reviewer of the Transportation Research Board, subcommittee of emergency evacuation ANB10(4), 2014.
- Reviewer of the Transportation Research Board, subcommittee of emergency evacuation ANB10(4), 2013.
- Reviewer of the Transportation Research Board, subcommittee of emergency evacuation ANB10(4), 2012.
- Reviewer of the Transportation Research Board, subcommittee of emergency evacuation ANB10(3), 2011.
- Reviewer of the Transportation Research Board, subcommittee of emergency evacuation ANB10(3), 2010.
- Reviewer of the Open Transportation Journal.
- Reviewer of Journal of Traffic and Transportation Engineering (English Edition), 2018
- Reviewer of Journal of Traffic and Transportation Engineering (English Edition), 2017
- Reviewer of the Transportation Research Board, subcommittee of Transportation in the Developing Countries ABE90, 2019.
- Reviewer of the Transportation Research Board, subcommittee of Transportation in the Developing Countries ABE90, 2018.
- Reviewer of the Transportation Research Board, subcommittee of emergency evacuation ABR30, 2018.
- Reviewer of Merit Research Journal of Business and Management
- Reviewer of the 8th Traffic Safety Conference/ Jordan
- Reviewer of the 20th EURO Working Group in Transportation (EWGT 2017)/ Budapest
- Reviewer of International Journal of Disaster Risk Reduction
- Reviewer of Periodica Polytechnica- Transportation Engineering
- Reviewer of Transportation Research, Part D
- Reviewer of KSCE Journal of Civil Engineering
- Reviewer of World Academy of Science, Engineering and Technology International Journal
- Reviewer of American Journal of Civil Engineering and Architecture

Scholarships & Awards

2010	Scholarship, Department of Homeland Security, Washington, DC
2009	Deep South/ Institute of Transportation Engineers Award
2007	Houston Helene M. Overly Memorial Scholarship Award