Academic Resume

Mohammad M. Hamed (Ph.D.)

Professor of Civil and Environmental Engineering School of Natural Resources Engineering & Management Department of Civil & Environmental Engineering German Jordanian University

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Work Address

German Jordanian University School of Natural Resources Engineering & Management Department of Civil & Environmental Engineering Amman Madaba Road Amman 11118 Jordan

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Academic Background

Ph.D.	Transportation, University of Washington, Seattle, WA, USA	1990
MSc.	Transportation, Northwestern University, Evanston, IL, USA	1987
BSc.	Highway and Traffic Eng., Middlesex University, London, UK	1981
	(With Commendation)	

Appointments

Director, Vision Rehabilitation Center (VRC), German Jordanian University, April 7, 2022 – present.

Director, Road Safety Center of Excellence, German Jordanian University, Feb. 1st 2022 – present.

Professor, Civil and Environmental Engineering Department, School of Natural Resources Engineering & Management, German Jordanian University, Professor of Civil & Transportation Engineering, Sept. 2018 – present. (Moved from Jordan University of Science and Technology).

Minister of Energy and Mineral Resources, 2013-2015

CEO and Chief Commissioner of Electricity Regulatory Commission, 2012-2013

Strategic Analysis Manager at the Royal Hashemite Court, 2012

Director General and Vice Chairman of the Board of the Public Transport Regulatory Commission (PTRC), 2001-2006

Member of Board of Trustees at the Hashemite University, Zarqa, 2010-2014.

Member of Academic Affairs Committee at the Hashemite University, Zarqa, 2010-2014.

Board member, Land Transport Regulatory Commission, 2012-2012

The International Association of Public Transport (UITP) Vice President, 2003-2006

Director General, Public Transport Regulatory Commission (PTRC), (Secondment from JUST), Amman, Jordan, 2001-2006.

Minister of Transport Advisor, Ministry of Transport, Amman, Jordan, (Full-time from Feb. 1999 to Sep. 1999 during sabbatical Leave), 1999-2001.

Professor, Civil Engineering Department, Jordan University of Science and Technology (JUST), Irbid, Jordan, Professor of Transportation Engineering, 2001 to 2006.

Associate Professor, Civil Engineering Department, Jordan University of Science and Technology (JUST), Associate Professor of Transportation Engineering, 1996-2001.

Associate Professor, Civil Engineering Department, Al Isra University, Associate Professor of Transportation Engineering, 1998 (Sabbatical Leave), 2nd Semester of 1998.

Associate Professor, Civil Engineering Department, Applied Science University, Associate Professor of Transportation Engineering, 1998 (Sabbatical Leave), 2nd Semester of 1998.

Head of Transportation Division, Civil Engineering Department, Jordan University of Science and Technology (JUST), 1997-1998.

Assistant Professor, Civil Engineering Department, Jordan University of Science and Technology (JUST), Assistant Professor of Transportation Engineering, 1991-1996.

Visiting Professor, Civil Engineering Department, Lakehead University, Thunder Bay, Canada, Summer, 1996.

Teaching and Research assistant, Civil Engineering Department, University of Washington, Seattle, WA, USA. January, 1988-July 1990.

Section Head, Traffic Engineering Field Operations, Traffic Engineering Department, Municipality of Amman, Amman P.O.Box 132, Jordan. September, 1985- September, 1986.

Traffic Engineer, Traffic Engineering Department, Municipality of Amman, Amman, P. O. Box 132, Jordan. September 1984 - September 1985.

Resident Engineer, Public Works Department, Municipality of Amman, P. O. Box 132, Jordan. September 1983 - September 1984.

Resident Engineer, Military Housing Association, Jordan Armed Forces, Amman, Jordan. September 1981- September 1983.

Refereed Journal Publications

- 1. **Hamed, M. M.**, Kabtawi, D., Al-Assaf, A., Albatayneh, O., and Gharaibeh, E. (2023). Random parameters modeling of charging-power demand for the optimal location of electric vehicle charge facilities. Journal of Cleaner Production. Vol. 388(4), 136022. https://doi.org/10.1016/j.jclepro.2023.136022.
- 2. Sapnken, F. E., **Hamed, M. M.**, Soldo, B., and Tamba, J. G. (2023). Modeling energy-efficient building loads using machine-learning algorithms for the design phase. Energy and Buildings, Vol. 283, 112807. https://doi.org/10.1016/j.enbuild.2023.112807
- 3. **Hamed, M. M.**, Mohammed, A., and Olabi, A. (2022). Statistical analysis of industrial sector adoption decisions of renewable energy with unobserved heterogeneity. Under review Renewable and Sustainable Energy Reviews.
- 4. **Hamed, M. M.**, Ali, H., and Abdelal, Q. (2022). Forecasting annual electric power consumption using a random parameters model with heterogeneity in means and variances, Energy, 255, 124510. Doi: ttps://doi.org/10.1016/j.energy.2022.124510.
- 5. **Hamed, M. M.,** Almasri, A., Dalala, Z., and Alsaleh, R. (2021). Modelling the time duration until the adoption of residential rooftop solar photovoltaic systems. Journal of Energy Resources Technology, 2022,144(4): 041302, doi: https://doi.org/10.1115/1.4051572
- 6. **Hamed, M. M.**, Alsharif, M., Abdelhay, A., Shawaqfah, M., and Abu Othman, A. (2023). <u>Closure to "Integrated Modeling of Tap Water Perception and Consumption of Bottled Water: An Exploratory Analysis." Journal of Infrastructure Systems, Vol. 29(2). https://doi.org/10.1061/JITSE4.ISENG-2212.</u>
- 7. **Hamed, M. M.**, Alsharif, M., Abdelhay, A., Shawaqfah, M., and Abu Othman, A. (2023). <u>Erratum for "Integrated Modeling of Tap Water Perception and Consumption of Bottled Water: An Exploratory Analysis." Journal of Infrastructure Systems, Vol. 29(2). https://doi.org/10.1061/JITSE4.ISENG-2235</u>
- 8. **Hamed, M. M.**, Alsharif, M., Abdelhay, A., Shawaqfah, M., and Abu Othman, A. (2022). Integrated modelling of tap water perception and consumption of bottled water: An exploratory analysis. Journal of Infrastructure Systems, Vol. 28(1), 2022, doi: https://doi.org/10.1061/(ASCE)IS.1943-555X.0000661
- 9. **Hamed, M. M.**, Mustafa, A., AlSharif, M., and Shawaqfah, M. (2021). Modeling the households' satisfaction level with the first electric vehicle and the time until the purchase of the second electric vehicle. International Journal of Sustainable Transportation, Vol. 17(1), 52-64. Doi: https://doi.org/10.1080/15568318.2021.1983677
- 10. **Hamed, M. M.,** and Al-Eideh, Basel M. (2020) An Exploratory analysis of traffic accidents and vehicle ownership decisions using a random parameters logit model with heterogeneity in means. Analytic Methods in Accident Research, 25, 100116, https://doi.org/10.1016/j.amar.2020.100116
- 11. **Hamed, M. M.** (2019). Logistics Performance and Freight Sector in Jordan. European Journal of Scientific Research, 152 (4), 516-527.
- 12. **Hamed, M. M.** and Al-Eideh, Basel M. (2018). Modeling the demand for electric vehicles. European Journal of Social Sciences, 54 (4), 364-382.
- 13. Ali, Z., Easa, S., and **Hamed, M. M.** (2009). Stop-controlled intersection sight distance: minor road on tangent of horizontal curve. Journal of Transportation Engineering, ASCE, 135 (9), 650-657.
- 14. Easa, S., Hasan, M., and **Hamed, M. M.** (2005). Traffic collision analysis models: Review and empirical evaluation. Arab J. Administrative Science, 2005, 473-499.
- 15. **Hamed, M. M.** (2004). Securing a solid basis for the public transport sector in Jordan. Public Transport International Journal, Vol. 53, No. 5, pp. 42-45.

- 16. Ameen J. Alawneh, Basel M. AI-Eideh, **Mohammad M. Hamed** (2001). A Stochastic Model To Estimate Origin Destination Matrices Despite Missing Observations. International Journal of Applied Mathematics, Vol. 6, No. 3, pp. 293-299.
- 17. **Hamed, M. M.** (2001). Analysis of Pedestrians' Behavior at Pedestrian Crossings, Safety Science, Vol.38, No.1, pp.63-82.
- 18. **Hamed, M. M.** and Olaywah, H. H. (2000). Travel Related Decisions by Bus, Servis Taxi and Private Car Commuters in Amman, Jordan, *Cities*, Vol. 17, No.1, pp. 63-71.
- 19. **Hamed, M. M.**, Al-Eideh, B. and Al-Sharif, M. (2000). Traffic Accidents Under the Effect of the Gulf Crisis, *Safety Science*, Vol. 33, No.1-2, pp. 59-68.
- 20. **Hamed, M. M.**, A. K. El Jabali, and O. Dhaimat (2000). Bus Drivers' Self-Assessed Risk and Passengers' Opinions Toward Them: Some Empirical Evidence, *Journal of Traffic Medicine*, Vol. 28, No. 3-4, pp. 38-46.
- 21. **Hamed, M. M.** (1999). Stochastic Modeling of Airlines' Scheduled Services Revenue, Journal *of Air Transportation World Wide*, Vol.4, No.2, pp. 32-48.
- 22. **Hamed, M. M.**, Shatnawi, M. M., and Al-Masaied, H. R. (1999). Forecasting Urban Bus Transit Daily Revenue, *International Journal of Transport Economics*, Vol. XXVI, No.3, pp. 397-414.
- 23. **Hamed, M. M.** and Abdul-Hussain, A. A. (1999). Drivers' Familiarity with Urban Route Network Layout, Cities, Vol. 18, No.2, pp. 93-101.
- 24. **Hamed, M. M.** (1999). Modelling the Demand for Taxicab Services, *Road and Transport Research*, Vol. 8, No.3, pp.22-33.
- 25. **Hamed, M. M.** and Easa, S. M. (1998). Integrated Modeling of Urban Shopping Activities, *Journal of Urban Planning and Development*, ASCE, Vol. 124, No.3, pp.115-131.
- 26. **Hamed, M. M.** and Al Rousan, T. M. (1998). The Impact of Perceived Risk on Urban Commuters' Route Choice, *Road and Transport Research*, Vol. 7, No.4, pp. 46-63.
- 27. **Hamed, M. M.**, Jaradat, A. S., and Easa, S. M. (1998). Analysis of Commercial Mini-Bus Accidents, Accident Analysis and Prevention, Vol. 30, No. 5, pp. 555-567. https://doi.org/10.1016/S0001-4575(98)00021-9
- 28. **Hamed, M. M.**, Easa, Said M., and Batayneh Reem (1997). Disaggregate gap-acceptance model for unsignalized T-intersections, *Journal of Transportation Engineering*, ASCE, Vol.123, No.1, pp. 36-42.
- 29. **Hamed, M. M.**, Hensher, D. A., and Al-Masaied, H. R. (1997). The Duration between traffic accidents in the taxi sector: An empirical study, *Road and Transport Research*, Vol.6, No.1, pp.64-73.
- 30. **Hamed, M. M.** and Easa, S. M. (1997). Ordered probability modelling of seat belt usage, *Journal of Transportation Engineering*, ASCE, Vol. 124, No.3, pp.271-276.
- 31. **Hamed, M. M**. and Jaber, S. A. (1997). Modelling vehicle-time headways in urban multilane highways, *Road and Transport Research*, Vol. 6, No.4, pp. 32-44.
- 32. **Hamed, M. M.** and Al-Masaeid, H. (1996). Urban streets and signalized intersections accident prediction models, *Journal of Indian Highways*, Indian Road Congress, pp.29-36.
- 33. **Hamed, M. M.** and Nihan, N. (1996). Estimating intersection O-D matrices from observed time-series traffic counts: The Zellner estimator, *Journal of Advanced Transportation*, Vol. 30, No. 1, pp. 57-77.
- 34. Al-Masaeid, H., **Hamed, M. M.**, Abul-Ela M., and Ghannam, A. (1996). Consistency of horizontal alignment for different vehicle classes, *Transportation Research Record*, 1500, pp.178-183.
- 35. Al-Zu'bi, K. and **Hamed, M. M.** (1996). Households' electricity and natural gas demand models for the greater Amman area, *DIRASAT*, Vol.23, No.1, pp.83-92.
- 36. **Hamed, M. M.** and Abdel M. (1996). Effect of government policies and vehicle marketing strategies on household vehicle demand and fuel consumption, *Canadian Journal of Civil Engineering*, Vol.23, pp.587-594.
- 37. **Hamed, M. M.** and Al-Omar, S. (1995). Analysis of work trips in Jordan, *The Canadian Journal of Urban Research*, Vol.4, No.2, pp.271-292.
- 38. **Hamed, M. M.** and Hensher, D. (1995). Home to work trip characteristics following the gulf crisis: The experience in Amman, Jordan, *International Journal of Transport Economics*, Vol. XXII, No. 2, pp.167-180.
- 39. **Hamed, M. M.** Al-Masaied, H., and Bani-Said, Z. (1995). Short-term prediction of traffic volume in urban arterials, *Journal of Transportation Engineering* (ASCE), Vol. 121, No. 3, pp. 249-254.
- 40. Nihan, N., **Hamed, M. M.**, and Davis, G. (1995). Interaction between driver information, route choice, and optimal signal timing on a simple network, *Journal of Advanced Transportation*, Vol. 29, No.2, pp. 163-182.

- 41. **Hamed, M. M.** and Al Zu'bi B. K. (1995). Implications of comprehensive peace on the Middle East's transportation sector, Transportation Research Record, No. 1498, pp. 71-74.
- 42. **Hamed, M. M.**, et al. (1994). Traffic Accident Frequency and the Human Factor, *Journal of Traffic Medicine*, Vol. 22, No. 1, pp. 53-59.
- 43. Al-Masaied, H., **Hamed, M. M.** and Khedaywi, T. (1994). Empirical evaluation of olive husk in asphalt cement binder and bituminous concrete, *Transportation Research Record*, No. 1436, pp. 124-132.
- 44. Al-Masaid, H., Al-Suleiman, T. **Hamed, M. M.**, and Halawa, K. (1994). Impacts of small rural towns on road safety and traffic operation, *Road and Transport Research*, Australian Road Research Board, Vol. 3, No. 1, pp. 86-98.
- 45. **Hamed, M. M.** and Mannering, F. (1993). Modeling Travellers' Post-Work Activity Involvement: Toward A New Methodology, *Transportation Science*, Vol. 27, No. 4, pp. 381-394. https://doi.org/10.1287/trsc.27.4.381
- 46. Nihan, N. and **Hamed, M. M**. (1992). Fixed-Point Approach to Estimating Freeway Origin-Destination Matrices and the Effect of Erroneous Data on Estimate Precision, *Transportation Research Record*, 1357, pp.18-28.
- 47. Mannering, F. and **Hamed, M. M.** (1990). Commuter Welfare Approach to High Occupancy Vehicle Lane Evaluation: An Exploratory Analysis, *Transportation Research*, Part A, Vol. 24, No. 5, pp. 371-379. 10.1016/0191-2607(90)90049-c
- 48. Davis, G., Nihan, N., **Hamed, M. M.**, and Jacobson, L. (1990). Adaptive forecasting of freeway traffic congestion, *Transportation Research Record*, 1287, pp.29-33.
- 49. Mannering, F. and **Hamed, M. M.** (1989). Occurrence, Frequency, and Duration of Commuters' Work-to-Home Departure Delay, *Transportation Research*, Part B, Vol. 24 B, No. 2, pp.99-109. 10.1016/0191-2615(90)90022-q

International Conferences

- 50. Mannering, F. and **Hamed, Mohammad M**.: Analysis of commuters' work-to-home departure delay decision," Paper presented at the 1988 Transportation Research Board, (1988).
- 51. **Hamed, Mohammad M**. and Mannering, F.: Modeling travellers' post-work activity involvement: Toward a new methodology, Paper presented at the 1991 Annual Meeting of the Transportation Research Board, (1991).
- 52. **Hamed, Mohammad M.** and Mannering, F. Time varying Condition and their Effect on Dynamic Traffic Assignment Models, First International Conference on Applications of Advanced Technologies in Transportation Engineering, San Diego, California, pp.199-204, (1989).
- 53. Mannering, F. and **Hamed, Mohammad M**.: Effect of Frequent Flyer Programs on Travelers' Choice of Airline: An Empirical Analysis, Paper Presented at the 1990 Pittsburgh Modeling and Simulation Conference, (1990).
- 54. Davis, G., Nihan, N., **Hamed, Mohammad M**., and Jacobson, L.: Adaptive Forecasting of Freeway Traffic Congestion, First International Conference on Applications of Advanced Technologies in Transportation Engineering, San Diego, California, pp.293-298, (1989).
- 55. **Hamed, M.**, Mannering, F., 1991. Simulation of travelers' post-work activity involvement in time and space. *Proceedings of the Twenty-Second Annual Modeling and Simulation Conference*, Pittsburgh, PA.
- 56. **Hamed, Mohammad M**. and Al-Sulieman, T.: The impact of oil rationing on commuters' work mode choice in Amman Area: An empirical study, Paper presented at the Jordanian Conference on Civil Engineering, Vol. 1, pp. 293-302, (1992).
- 57. **Hamed, Mohammad M**_.: Temporal and spatial simulation of commuters' post work activity involvement," paper presented at the 34th Science Week, Damascus, Syrian Arab Republic, (1994).
- 58.H. R. Al-Masaeid and **M. M. Hamed**: Impact of Pavement Condition on Traffic Speed, Paper presented at the 73rd Transportation Research Board Annual Meeting, TRB, Washington, DC, USA, (1994).
- 59. **Hamed, M. M.** and Khries, I, H. (1995). Predicting urban arterial origin-destination trip tables, paper presented at Second World Congress on Intelligent Transport Systems: '95 Yokohama / edited by VERTIS. Tokyo, Japan: VERTIS, [1995] Vol. 4, pages 2001-2006.
- 60. **Hamed, Mohammad M.** Easa, Said M., and Batayneh R. Modelling gap-acceptance of unsignalized T-intersections: Toward a new methodology, paper presented at the 1st. Transportation Specialty Conference, Canadian Society of Civil Engineering, Alberta, Canada, Vol. II, pp. 381-387, (1996).

- 61. Easa, S., Li, S., and **Hamed, Mohammad M**. GIS Applications in infrastructure management: State of the Art, paper presented at the International Conference "Rehabilitation and Development of Civil Engineering Infrastructure Systems", American University of Beirut, Beirut, Lebanon, June 9-11, 1997.
- 62. **Hamed, Mohammad M.,** Ayyoub, I. and Easa, S. Modeling Bus cost functions in a Regulated Environment, paper presented at the 3rd Transportation Specialty Conference, Canadian Society of Civil Engineering, London, Ontario, Canada, 2000.
- 63. **Hamed, Mohammad** M. Public Transport Regulatory Commission: Jordan's Experience, paper presented at the UITP Workshop held in Dubai, 13-15 January 2003.
- 64. **Hamed, Mohammad M**. Bus Information Systems: The Experience in Jordan's Capital Amman, paper presented at the 3rd UITP Conference on Travel Information, Gothenburg, Sweden, 17-19 September 2003.
- 65. Ali, Z., Easa S., and **Hamed, M. M.** Stop-controlled intersection sight distance: minor road on tangent of horizontal curve, paper presented at the 6th Transportation Specialty Conference, Canadian Society for Civil Engineering, Toronto, ON, 2005.
- 66. **Hamed, M**. M. and Easa, S. Privatizing public transport services in Jordan. Paper presented at the 6th Transportation Specialty conference, Canadian Society for Civil Engineering, Toronto, ON, 2005.

Citations of Published Work

Published work has been cited 2214 times in Google Scholar

(https://scholar.google.com/citations?view_op=list_works&hl=en&authuser=1&user=8-

TNbHYAAAAJ&gmla=AJsN-

 $F6FQfMxF6elb6nbDGVdxCMsDUUjBzQZSeCOpSdQf7VXlPGNnFN5TnilVg46UmTvY8XbInZqK1SeH35lmWwV1S7lc7w7_QyxtZ3fOPbKn0n7-KalDqQ); Google Scholar h-index = 16.$

Published Work in Journals Impact Factor

Journal	IF
Analytic Methods in Accident Research	14.56
Journal of Cleaner Production	11.07
Energy	8.856
Energy and Buildings	7.201
Transportation Science, Elsevier, USA	5.749
Transportation Research, Part B, Elsevier, USA	6.314
Transportation Research, Part A, Elsevier, USA	5.518
Accident Analysis and Prevention, Elsevier, USA	4.537
Safety Science, Elsevier, USA	6.500
Journal of Urban Planning and Development, ASCE, USA	2.361
Cities, Int. Journal of Urban Policy & Planning, Elsevier, USA	6.077
Journal of Transportation Engineering, ASCE, USA	2.180
Transportation Research Record, TRB, USA	1.686
Journal of Advanced Transportation, John Wiley, USA	2.287
Canadian Journal of Civil Engineering, CSCE, Canada	1.790
Journal of Energy Resources Technology	3.183
International Journal of Sustainable Transportation	3.647
Journal of Infrastructure Systems, ASCE	2.734

Editorial Activities

- Editor-in-Chief and Founder, International Journal of Transportation, Privatization & Public Policy Founding Editor (currently not active), 2001.
- Editorial Board Member, Accident Analysis and Prevention Journal, Elsevier Science, USA, 2001-2021
- Editorial Board Member, Transportation Research Part F: Traffic Psychology and Behaviour, Elsevier Science, USA, 2013-2017.
- Appointed Member of the TRB Committee on Statistical Methods AED60
- Chair, Best Paper Award Task-Group, AED60 Standing Committee on Statistical Methods of the TRB of the National Academies, 2021 – present

Appointed Reviewer to:

Accident Analysis and Prevention Journal, Elsevier Science, USA

TRB Annual Meeting paper review, USA

Travel Behaviour and Society, Elsevier, USA

Water Resources Management, Springer, Germany

Energy Research & Social Science, Elsevier, USA

The Energy Journal, IAEE, USA

Journal of Transportation Engineering, Part A, ASCE, USA

Journal of Infrastructure Systems, ASCE, USA

Transportation Research, Part B, Elsevier Science, USA

Transportation Research, Part F, Elsevier Science, USA

Urban Planning and Development Journal, ASCE, USA

Transportmetrica A: Transport Science, USA

Journal of Air Transportation, USA

IEEE THMS Journal, USA

IET Radar, Sonar & Navigation, USA

The Open Transportation Journal

Sustainability journal, MDPI, Swiss

Safety, MDPI, Swiss

Systems, MDPI, Swiss

Environmental Systems Research

International Journal of Environmental Research and Public Health

Jordan Journal of Civil Engineering, Jordan

Awards and Recognition

- Recipient of the 2022 (and Inaugural) Best Reviewer Award given by the AED60 Standing Committee on Statistical Methods of the TRB of the National Academies.
- Selected by the Journal of Urban Planning and Development as an ASCE 2020 Outstanding Reviewer
- Selected by the Journal of Urban Planning and Development as an ASCE 2015 Outstanding Reviewer
- Director General, PTRC won **Shiek Mohammed Bin Rashed Al Maktom** Prize as the Best Arab Governmental entity for the year 2005.

- The "Excellence" award for the year 2005 for his role and achievement as the Director General of PTRC, 2005
- The "Excellence" award for the year 2004 for his role and achievement as the Director General of PTRC, 2004
- **Recognition Awards** from the International Association of Public Transport (UITP), 2003-2005
- Director General, PTRC received "KING ABDULLAH II AWARD for Government Performance and Transparency". This award is the highest and the most prestigious award in the national level, 2003.
- Chi Epsilon Honor Society
- Who's Who in the World

International Consultancies

Key Expert, TA EBRD, Evaluation of energy storage options and procurement in Jordan, Oct. 2017 – August, 2018

Key Expert, Lebanon, Study on Results Measurement in the Transport Sector for Projects Financed by the European Commission Study on Results. Measurement in the Transport Sector funded by EU in 5 countries Djibouti, Cameroon, Ghana, Lebanon and Belize. Nov. 2016 – July, 2017.

Senior Logistics Expert, Technical Assistance for the implementation of the regional initiative Logismed Soft training, EIB funded project, 2016-present. Amman, Jordan

Key Expert, Transport Planner, Technical Assistance to Support the Ministry of Transport (MoT) in Jordan within the Trade and Transport Facilitation Program (Euro 33M). EU funded project, 2010-2012. Amman, Jordan.

PPP and Transport Infrastructure Expert, Trade and Transport Facilitation Programme Monitoring Missions, EU funded project. 2010. Amman, Jordan.

Project Technical Director / Transportation Planner, Design and Development of a Bus Rapid Transit (BRT) system for the Greater Amman Municipality (GAM). 2009-2010. Amman, Jordan.

Civil Aviation Expert, Evaluation of Yemen Civil Aviation Support. Installation and commissioning of VOR/DME navigational aids equipment in three Yemeni airports. EU funded project. EU funded project. 2009-2010. Sana, Yemen

Transport Planner /Transport Infrastructure and Logistics Expert, National Industrial Strategy. Facilitate industrial Growth by addressing ports, multi-modal transport and connectivity to industrial cities. 2009.

Private Sector Development and Trade Facilitation Expert, Final evaluation and monitoring of the implementation of the Sector Reform Facility programme. EU Funded project. EU funded project. 2009, Amman, Jordan.

Transport Planner / Trade and Transport Expert, Trade in Services Benchmarking Study. Conduct a comprehensive assessment of the transport sector infrastructure and services in Jordan. 2008-2009. Amman, Jordan.

Trade and PPP Expert, Appraisal/Formulation Mission for support to Trade and Transport Facilitation Programme. (*MEDA*). Formulation of a €33 million Trade and Transport Facilitation Programme. EU funded project. 2008-2009. Amman, Jordan.

Monitoring and Evaluation and Public Sector Reform Expert, Monitoring Sector Reform Facility (SRF) Programme funded by the EU. Second Monitoring Mission. EU funded project. 2007. Amman, Jordan.

Privatization, PPP and Public Sector Reform Expert, Support to the Reform of Public Finance – Formulation Mission: Project in Support of Public-Private Partnerships (PPP). EU funded project. 2007. Amman, Jordan.

Cold and Frozen Food Facilities Feasibility Study, Bankable Feasibility study for cold and frozen food storage facilities to be established in Southern of Jordan's Capital Amman. 2007.

Public Sector Reform and Capacity Building Expert, Appraisal/Formulation Mission of the Support to the Reform of Public Finance and Public Administration Programme in Jordan. EU funded project. 2007. Amman, Jordan.

Private Sector Development Expert, Monitoring Sector Reform Facility Programme in Jordan funded by the EU. EU funded project. 2006-2007. Amman, Jordan.

International and Local Workshops

Participated in over 60 specialized International, Regional and local Workshops. Keynote Speaker for a significant number of events, workshops and conferences

Major Research Interests

ITS; Traffic Safety; Renewable Energy; Energy Efficiency and Storage; Probabilistic Modelling; Behavioural Models and Econometric Methods; Travel Demand Modelling and Activity-based Analysis; Traffic Analysis and Management; Water demand analysis and Management; and Highway and Airport Investments

Teaching

German Jordanian University (GJU), School of Natural Resources Engineering and Management, Department of Civil & Environmental Engineering September 23, 2018- present

Undergraduate Courses

- CVE 330 Highway Engineering
- CVE 333 Transportation Engineering

Graduate Courses

- ERE 721 Applied Mathematics for Engineers
- ERE 723 Advanced Numerical Methods
- ERE 792 Special topics in Environmental Engineering
- SP747 Urban Transportation

Supervising 14 MSc students at GJU

Al al-Bayt University, Lecturer

Civil Engineering Department, Mafraq, Jordan (2016-2017)

- Traffic Engineering
- Special Topics in Transportation Engineering

Jordan University of Science and Technology,

Civil Engineering Department, Irbid, P.O.Box 3030, Jordan. (1991-2006)

- a. Undergraduate Courses in Civil Engineering
 - **Advanced Transportation Engineering**
 - **Transportation Planning**
 - Transportation Engineering
 - Highway Traffic Lab.
 - Highway and Traffic Engineering
 - **Engineering Drawing**
 - Static
 - **Probability and Statistics**
 - Graduation Project1 and 2- supervised over 20 graduation projects in Transportation Engineering
- b. Graduate courses in Civil and Transportation Engineering
 - **Advanced Engineering Mathematics**
 - **Urban Planning**
 - Highway Design and Capacity

Supervised 12 MSc students at J.U.S.T

Al Isra University, Civil Engineering Department,

Amman, Jordan. (1998)

- Highway (1)
- Traffic Engineering
- Surveying (1)

Applied Science University, Civil Engineering Department,

Amman, Jordan. (1998)

Highway and Traffic Engineering

University of Washington, Civil Engineering Department, Seattle, WA, 98195 USA.

- Teaching Assistant, Course "CETS511", Traffic Systems Operations (winter,1988 and 1989) Teaching Assistant, Course "CETS410", Traffic Engineering Fundamentals (fall, 1988)
- Teaching Assistant, Course "CETS571", Analytical Methods in Transportation (spring, 1989).

Graduate Studies

- a. Supervised the following graduate students for their award of master degree in Civil and Transportation Engineering, Jordan University of Science and Technology:
- 1. Zahi Bani-Said. (1992). Short-term forecasting of traffic volume in Amman's urban arterials, M.Sc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.

- 2. Malak M. Shatnawi. (1993). Forecasting public transit ridership in the greater Amman area, MSc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 3. Samer Al-Omar. (1993). Investigation of work- trips mode choice, MSc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 4. Majed Gh. Al-Zumot. (1993). Predicting Traffic accidents in Jordan, MSc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 5. Reem Batayneh. (1994). Stochastic model for the estimation of driver gap-acceptance parameters at unsignalized intersections, MSc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 6. Ibrahim H. Khries. (1994). Predicting urban arterials origin-destination matrices, MSc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 7. Asem Jaradat. (1996). Analysis of mini-bus traffic accidents in Jordan, M.Sc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 8. Saeed A. Jaber. (1996). Estimating vehicle headways for rural two-lane highways in Jordan, M.Sc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 9. Hatem H. Olaywah (1997). Investigating the characteristics of captive riders in the greater Amman area, M.Sc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 10. Taleb M. Al Rousan (1997). Analysis of urban trips with perceived risks in Amman, M.Sc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 11. Aslam A. Al-Omari (1998). Interaction between urban planning, transportation system, and vehicle emissions in urban arterials, M.Sc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- 12. Ali A. Abed Al-Hussein (1998). Analysis of drivers' familiarity with urban transportation network in the capital Amman, M.Sc. Thesis, Department of Civil Engineering, Jordan University of Science and Technology, Irbid, Jordan.
- b. <u>Supervised</u> the following graduate students for their award of master degree in Civil and Environmental Engineering, German Jordanian University:
- 1. Adnan Kh. Al-Masri. (2020). Household Demand for Rooftops Solar Panels in Jordan. MSc. Thesis, Department of Civil and Environmental Engineering, German Jordanian University, Amman, Jordan.
- 2. Dima M. Kabtawi (2020). The Optimal Location of Charging Stations for Electric Vehicles in Jordan (Case Study: Amman). MSc. Thesis, Department of Civil and Environmental Engineering, German Jordanian University, Amman, Jordan.
- 3. Amin S. Mustafa (2020). Modeling Electric Vehicle Ownership and Utilization. MSc. Thesis, Department of Civil and Environmental Engineering, German Jordanian University, Amman, Jordan.
- 4. Bassam S. Abdulkhaleq. (2020). Factors Influencing the Demand for Bottled Water. MSc. Thesis, Department of Civil and Environmental Engineering, German Jordanian University, Amman, Jordan.
- 5. Hesham Ali. (2021). Developing models to forecast the consumption of electricity in Jordan. MSc. Thesis, Department of Civil and Environmental Engineering, German Jordanian University, Amman, Jordan.
- 6. AlShaer Ahmad. (2022). Creating Sustainable Urban Mobility Safety Models MSc. Thesis, Department of Civil and Environmental Engineering, German Jordanian University, Amman, Jordan.
- 7. Ali Mohammed (2022). Role of Renewable Energy in the Jordanian Industrial Sector. MSc. Thesis, Department of Civil and Environmental Engineering, German Jordanian University, Amman, Jordan.
- c. <u>Member on examining committees</u> for 14 graduate students for their award of master degree in Civil and Transportation Engineering.