

CURRICULUM VITAE

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EDUCATION

Ph.D.	University of Florida	Civil Engineering	1990
M.S.	University of Baghdad	Civil Engineering	1981
B.S.	University of Baghdad	Civil Engineering	1978

FULL-TIME ACADEMIC EXPERIENCE

August 2016 – Present	Professor, Florida International University, Civil Engineering
June 2015 – August 2016	Graduate Program Director, Florida International University, Civil Engineering
August 2009– Present	Associate Professor Florida International University, Civil Engineering
August 2005 – August 2009	Assistant Professor Florida International University, Civil Engineering
2003 – 2005	Adjunct Professor Florida International University, Civil Engineering
January 1991 – July 1995	Research Faculty University of Florida, Transportation Engineering
August 1990 – January 1991	Post-Doctorate Research Associate University of Florida, Transportation Engineering
August 1987 – August 1990	Adjunct Professor University of Florida, Transportation Engineering

NON-ACADEMIC EXPERIENCE

1999 - 2005	Senior ITS Specialist/ITS Technology Manager, PBS&J
1995 - 1999	Senior Transportation Engineer, PBS&J
1983 – 1986	Researcher, Highway Engineering, Scientist Research Center (Baghdad, Iraq)

PUBLICATIONS IN DISCIPLINE

REFEREED JOURNAL PAPERS

1. Fakharian Qom, S., Y. Xiao, and M. Hadi. Queue Length Estimation for Freeway Facilities Based on the Combination of Point Traffic Detector Data and Automatic Vehicle Identification Data. In Press. Accepted for or publication at Transportation Research Record: Journal of the Transportation Research Board, 2017.
2. Iqbal, M. S., Hadi, M., & Xiao, Y., Predicting Arterial Breakdown Probability: A Data Mining Approach,” Journal of Intelligent Transportation System. In press.
3. Chen, X., M Hadi, Y. Xiao, and L. Elefteriadou. “Development of Macroscopic Emission Estimation Model based on Microscopic Operating Modes,” Transportation Research Record: *Journal of the Transportation Research Board*, No. 2570, Washington, D.C., 2016, pp. 39-47.
4. Fakharian Qom, S., Y. Xiao, M. Hadi, and H. Al-Deek, "Estimation of Freeway Density Based on the Combination of Point Traffic Detector Data and Automatic Vehicle Identification Data," Transportation Research Record: Transportation Research Record: *Journal of the Transportation Research Board*, No. 2484, Washington, D.C., 2015, pp. 110–118.
5. Consoli, F., A. Alomari, H. Al-Deek, J. Rogers, M. Noori, A. Sandt., O. Tatari, and M. Hadi, “Evaluation of Conditional Transit Signal Priority Technology for Regional Implementation,” Transportation Research Record: Transportation Research Record: *Journal of the Transportation Research Board*, No. 2484, Washington, D.C., 2015, pp. 140–148.
6. Hadi, M., Y. Xiao, P. Hu, A. Ramirex, and S. Shabaniyan, “Impact of Modeling Parameters on the HCM-Based Procedure to Estimate Reliability of Freeway Corridors,” Transportation Research Record: Transportation Research Record: *Journal of the Transportation Research Board*, No. 2461, Washington, D.C., 2015, pp. 50-57.
7. Fakharian Qom, S., Y. Xiao, M. Hadi, and H. Al-Deek, “Comparison of Instantaneous and Experienced Travel Time Using Point Detector Data and AVI Data,” *Journal of the Transportation Research Board*, Transportation, Transportation Research Board, No. 2470, Washington, D.C., 2014, pp 95-104.
8. Shabaniyan, S, and M. Hadi, “Capacity Estimation in Support of Mesoscopic Simulation as Part of Dynamic Traffic Assignment Models,” *Journal of the Transportation Research Board*, No. 2466, Transportation, Transportation Research Board, Washington, D.C., 2014, pp. 68-75.
9. Hadi, Y. Xiao, and M. Rojas, “Estimation of Diversion Rate during Incidents based on Mainline Detector Data,” Transportation Research Record: *Journal of the Transportation Research Board*, No. 3786, Washington, D.C., 2013, pp. 54-60.
10. Shen, L. and M. Hadi, “Practical Approach for Travel Time Estimation from Point Traffic Detector Data,” *Journal of Advanced Transportation*, Volume 47, No. 5, John Wiley & Sons, Inc., 2013, pp. 526-535.
11. Alvarez, P. and M. Hadi, “Time-Variant Travel Time Distributions and Reliability Metrics and Their Utility in Reliability Assessments,” Transportation Research Record: *Journal of the Transportation Research Board*, No. 2315, 2012, pp. 81-88.
12. Zhan, C., A. Gan, and M. Hadi, “Prediction of Lane Clearance Time of Freeway Incidents Using the MSP Tree Algorithm,” *IEEE Transactions on Intelligent Transportation Systems*, 12(4), 2011, pp. 1549-1557.
13. Hadi, M. and P. Sinha, “Effect of Pavement Marking Retroreflectivity on the Performance of Vision-Based Lane Departure Warning Systems,” *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*, Volume 15, Issue 1, Taylor & Francis Publishers, Oxford, UK, 2011, pp 42-51.

14. Wu, W.Y., A. Gan, F. Cevallos, and M. Hadi, "A Multi-Objective Optimization Model for Prioritizing Transit Stops for ADA Improvements," *ASCE Journal of Transportation Engineering*, Vol. 137, No. 8, 2011, pp. 580-588.
15. Hadi, M, L. Shen, J. Li, Y. Xiao, D. Chen, "A Simulation Tool to Assess the Impacts of the Parameters of Service Patrol Operations," *Journal of the Transportation Research Board*, No. 2178, Transportation, Transportation Research Board, Washington, D.C, 2010, pp. 111-118
16. Xiao Y., M. Hadi., Ozen, H., Mysore V., "An ITS Evaluation Tool in the FSUTMS Regional Demand Modeling Environment," *Journal of the Transportation Research Board* No. 2176, Transportation, Transportation Research Board, Washington, D.C, 2010, pp. 76-83.
17. Alvarez, A., M. Hadi, C. Zhan, "Using Intelligent Transportation Systems Data Archives for Traffic Simulation Applications," *Journal of the Transportation Research Board*, Transportation Research Record 2161, Transportation Research Board, Washington, D.C., 2010, pp. 29-39.
18. Hadi, M., Y. Xiao, C. Zhan, A. Gan, "Use of the HCM Freeway Facility Procedures Combined with ITS Data Archives to Assess the Benefits of Incident Management Systems," *Journal of the Transportation Research Board* No. 2173, Transportation, Transportation Research Board, Washington, D.C, 2010, pp. 115-122.,
19. Zhan, C., A. Gan, M. Hadi, "Identifying Secondary Crashes and Their Contributing Factors," *Journal of the Transportation Research Board*, Transportation Research Record 2102, Transportation Research Board, Washington, D.C., 2009, pp.68-77.
20. Hadi, M., L. Shen, C. Zhan, Y. Xiao, S. Corbin, and D. Chen, "Use of Operation Data to Evaluate the Benefits and Costs of Advanced Traffic Management Components," *Journal of the Transportation Research Board*, Transportation Research Record 2086, Transportation Research Board, Washington, D.C., 2008, pp.48-55.
21. Hadi, M, P. Sinha, and A. Wang, "Modeling Reductions in Freeway Capacity due to Incidents in Microscopic Simulation Models," *Journal of the Transportation Research Board*, Transportation Research Record 1999, Transportation Research Board, Washington, D.C., 2007, pp. 62-68.
22. Hadi, M., P Sinha, and J.R. Easterling, "Effect of Environmental Conditions on Image Recognition-Based Lane Departure Warning System Performance," *Journal of the Transportation Research Board*, Transportation Research Record 2000, Transportation Research Board, Washington, D.C., 2007, pp. 114-120.
23. Hadi, M., P. Sinha, J. Shuerger, and J. Easterling, "Commercial Vehicle Driver Acceptance of Lane Departure Warning Systems," *Journal of Institute of Transportation Engineers* (on the web), Washington, D.C., March 2008.
24. Yang, S., S. Luou, and M. Hadi, "Risk Analysis to Account for Uncertainty in Benefit-Cost Evaluations of Intelligent Transportation Systems," *Journal of the Transportation Research Board*, Transportation Research Record 2035, Transportation Research Board, Washington, D.C., 2007, pp. 187-194.
25. Hadi, M., Quigley, D., Sinha, P., and L Hsia, "ITS Benefit and Cost Parameters for Use in IDAS Evaluations of ITS Deployments in Florida," *Journal of the Transportation Research Board*, Transportation Research Record 1910, Transportation Research Board, National Research Council, Washington, D.C., 2005, pp. 57-63.
26. Hadi, M. and J. Thacker, "Use of Speed Differential as a Measure to Evaluate the Need for Right-Turn Deceleration Lanes at Unsignalized Intersections," *Journal of the Transportation Research Board*, Transportation Research Record 1847, Washington D.C., January 2003, pp. 58-65.
27. Hadi, M., J. Aruldas, L.F. Chow, and J.A. Wattleworth, "Estimating the Safety Effects of Cross-Section Design for Various Highway Types Using Negative Binomial Regression," *Journal of the Transportation Research Board*, Transportation Research Record 1500, Washington, D.C., 1995, pp. 169-177.
28. Hadi, M. and C.E. Wallace, "Optimization of Signal Phasing and Timing Using Cauchy Simulated Annealing," *Journal of the Transportation Research Board*, Transportation Research Record 1456, Washington, D.C., 1994, pp. 64-71.

29. Hadi, M. and C.E. Wallace, "A Hybrid Genetic Algorithm to Optimize Signal Phasing and Timing," *Journal of the Transportation Research Board*, Transportation Research Record 1421, Washington, D.C., 1993, pp. 104-112.
30. Hadi, M. and C.E. Wallace, "Progression Based Optimization Model in TRANSYT-7F," *Journal of the Transportation Research Board*, Transportation Research Record 1360, Washington, D.C., 1992, pp. 74-81.

REFEREED PROCEEDINGS

1. Iqbal, M.S., M. Hadi, and Y. Xiao, "Accuracy and Reliability of Estimated Travel Time Using Basic Safety Message Data Collected from Connected Vehicles," Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2017.
2. Iqbal, M.S., M. Hadi, and Y. Xiao, "Assessment of Link-Level Variation of Connected-Vehicle Market Penetration," Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2017.
3. Khazraeian, S., M. Hadi, and Y. Xiao, "Assessment of the Benefits of Queue Warning in a Connected Vehicle Environment Based on Surrogate Safety Measures," Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2017.
4. A. Massahi, M. Hadi, M.A. Cutillo, Y. Xiao, "Estimating the Capacity Impacts of Urban Street Incidents", Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2017.
5. Fartash, H., M. Hadi, Y. Xiao, and R. Ponnaluri, "Assessment of the Need for System Warrants in Addition to Local Warrants for Ramp Metering Installation," Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2017.
6. Aghdash, B., S. Khazraeian, J. Trask, M.Hadi, N. Roupail, "Incorporating Adaptive Ramp Metering in the Highway Capacity Manual Context," Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2017.
7. J. Trask, N. Roupail, B. Aghdashi, S. Khazraeian, M.Hadi, "Incorporating Dynamic Traffic Management Interventions into the HCM Freeway Facility Methodology," Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2017.
8. Fakharian Qom, S., Xiao, Y., and Hadi, M., "Evaluation of Cooperative Adaptive Cruise Control (CACC) Vehicles on Managed Lanes Utilizing Macroscopic and Mesoscopic Simulation", Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2016.
9. Fartash, H., M. Hadi, Y. Xiao, Y., "Utilization of HCM Urban Facility Procedures for Estimation and Real-Time Prediction of Travel Time with Consideration of Rain Impacts", Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2016.
10. Massahi, A., M. Hadi, Y. Xiao, "Improved Model for Estimating Incident Impact on Urban Street Travel Time with Consideration of Upstream Intersection Capacity Reduction", Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2016.
11. Trask, J., N. Roupail, B. Aghdashi M. Hadi, S. Khazraeian, "Integrating Dynamic Traffic Management Interventions into the HCM Freeway Facility Methodology," Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2016.
12. Jia, J., M. Ibrahim, Y Xiao, W. Orabi, A. Mostafavui, "Estimation of the Total Cost of Bridge Construction for use in Accelerated Bridge Construction Selection Decisions", Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2016.
13. Khazraeian, S., M. Hadi, Y. Yan, "Detection of Freeway Incidents Based on Vehicle Acceleration Measurements Using Connected Vehicle Data, Proceedings of the Transportation Research Annual Meeting, Washington D.C., January 2016.

14. Shabaniyan, S. and M. Hadi, "Dynamic Traffic Assignment in Managed Land Facilities Utilizing Detailed Detector and Toll Data," Proceedings of the 94th Annual Meeting of the Transportation Research Board, Washington, D.C. 2015.
15. Jia, J., Y. Xiao, and M. Hadi, "Developing and applying Estimation Model for Travel Time Index under Uninterrupted Condition," Proceedings of the 94th Annual Meeting of the Transportation Research Board, Washington, D.C. 2015.
16. Chen, X., Y. Xiao, M. Hadi, M. Ackert, and P. Lin, "Assessment of Pre-Preemption Strategy of Traffic Signals near Railroad Grade Crossing Utilizing Simulation Analysis," Proceedings of the 93rd Annual Meeting of the Transportation Research Board, Washington, D.C. 2014.
17. Hadi, M., H. Ozen, S. Shabaniyan, Y. Xiao, and W. Zhao, "Processes to Guide the Application of Dynamic Traffic Assignment by Transportation Agencies," Proceedings of the 91th Annual Meeting of the Transportation Research Board, Washington, D.C., 2012.
18. Zhan, Chengjun, Patricio Alvarez, Mohammed Hadi, and Yan Xiao, "Software-in-the-Loop Simulation in Support of Evaluating Traffic Management Center Software," Proceedings of the 90th TRB Annual Meeting, Washington, D.C, January 2011.
19. Shen, L. and M. Hadi, M., "Freeway Travel Time Prediction with Dynamic Neural Networks," Proceeding of the 89th Annual Meeting of the Transportation Board, Washington, D.C, January 2010.
20. Wanyang, W., A. Gan, F. Cevallos, D. Shen, M. Hadi, "GIS-Aided Decision-Making Process for Selecting Bus Stops for ADA Improvements," Proceedings of the 89th Annual Meeting of the Transportation Board, Washington, D.C., January 2010.
21. Qiang, H, M. Hadi, Y. Xiao, C. Zhan, "Estimating Incident Detection Time based on Incident Management and Traffic Detector Data," Proceedings of the 89th Annual Meeting of the Transportation Board, Washington, D.C., January 2010.
22. Lue, C., F. Zhao, M. Hadi, "Analytical Travel Time Estimation Method for Planning Models," Proceedings of the 89th Annual Meeting of the Transportation Board, Washington, D.C., January 2010.
23. Luou, S. and M. Hadi, "Freeway Travel Time Estimation from Point Traffic Detectors," Proceedings of the 88th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2009.
24. Lahiri, S. and M. Hadi, "Comparing Passenger Car Equivalencies of Heavy Vehicles Estimated according to Different Simulation Tools," Proceedings of the 87th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2008.
25. Xiao, Y, M. Hadi, and V. Mysore "Integrated Intelligent Transportation System Evaluation and Demand Forecasting Environment," Proceedings of the 87th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2008.
26. Yang, S., F. Mie, and M. Hadi, "Estimation of Incident Delays on Arterial Streets," Proceedings of the 87th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2008.
27. Zhan, C., L. Shen, M. Hadi, and A. Gan "A Study of Freeway Secondary Crash Characteristics," Proceedings of the 87th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2008.
28. Zhan, C., A. Gan and M. Hadi, "Mining Freeway Service Patrol Data," Proceedings of the ASCE Conference on Applications of Advance Technology in Transportation, Chicago, IL, August 2006, pp. 304-309.
29. Thacker, J., M. Hadi, and F. Vargas, "A Methodology to Evaluate the Prevention of Median Opening Movements," Proceedings of the Transportation Research Board Fourth National Conference on Access Management, Portland, OR, August 2000.
30. Hadi, M., C.E. Wallace, and C. Jacks, "TRANSYT-7F Simulation Model for Congested Conditions," Proceedings of the 78th Annual Meeting of the Transportation Research Board, Washington, D.C., January 1999.

NON-REFEREED ARTICLES

1. Hadi, M., Y. Xiao, E. Birriel, M. Plass, M. Ackert, "Research Pays Off: Development of Traffic Management Center Decision Support Tools," Transportation Research Circular, Transportation Research Board, Washington, D.C., In Press.
2. Hadi, M. and V. Mysore, "Evaluation Tools to Support ITS Planning Process: Development of a Sketch Planning Tool in FSUTMS/Cube Environment," Modeling Transport, Vol.1, No. 1, San Francisco, CA, Fall, 2009.
3. Hadi, M. and V. Mysore, "Evaluation Tools to Support ITS Planning Process: Development of a Sketch Planning Tool in FSUTMS/Cube Environment," Florida Transportation Modeling Newsletter, Tallahassee, FL, Volume 39, December 2008.
4. Hadi, M.A., G. Pesti, Y-C Chiu, and D. Ni "Data Repository to Support Traffic Simulation Research and Development - Data Needs," TRB Joint Traffic Simulation Subcommittee News Letter No. 4, July 2007.

PRESENTED PAPERS AND LECTURES

INVITED PRESENTATIONS

1. Hadi, M., "Presented at the TRB Annual Meeting Latest Accelerated Bridge Construction Innovations from Research Workshop, Washington, D.C., January, 2017.
2. Hadi, M., "Processes to Support the Application of DTA by Transportation Agencies," Presented at the TRB Annual Meeting Dynamic Traffic Assignment and Agent Based Modeling Workshop, Washington, D.C., January, 2015.
3. Hadi, M., "Tools to Support Transportation System Management and Operations (TSM&O)," Presented at ITS World Congress, Detroit, MI, September 2014.
4. Hadi, M., "Performance Measurements based on Archived Data from Multiple Sources in Florida," In Sustainable Transportation Performance Measures: Best Practices, ITS World Congress, Detroit, MI, September 2014.
5. Hadi, M., "Utilizing SHRP 2 Reliability Products in Support of Traffic Management Center Operations - Lessons Learned from a Pilot Project in Florida," ITS Florida Lunch and Learn Webinar Series, August 29, 2014.
6. Hadi, M., "Issues and Experience in Teaching ITS," in Educating Students for ITS Careers: Are Universities Meeting the Challenge?, USDOT T3 Webinar Series, February 2014.
7. Hadi, M., "Pilot Testing of SHRP Products," Presented at ITSA annual Meeting, Nashville, Tennessee, April, 2013.
8. Hadi, M., and A. Krishnamurthy, "Florida DOT's ITS Decision Support Software," Part of Session Organized by IBEC at the ITS World Congress, Orlando, FL, December 2011.
9. Hadi, M., "Calibrating Microscopic Simulation for Incident Conditions," Presented at ITS World Congress, Orlando, FL, December 2011.
10. Hadi, M., "Intelligent Transportation System," Florida International University, School of Computing and Information Sciences, Miami, FL, November 2010.
11. Hadi, M., "Integration and Optimization in Intelligent Transportation Systems," Transportation and Technology committee Breakfast, Sponsored by IBM, Greater Miami Chamber of Commerce, Miami, FL, November 2009.
12. Hadi, M., "Application of ITS Data Warehouse for Decision Support Tools and Simulation," TRB Workshop Identifying Traveler Information Research Needs, Irvine, CA, April 16, 2009.
13. Hadi, M., "ITS Evaluation Applications," Lee County ITS Stakeholder Meeting, Fort Myers, FL, April 22, 2009.
14. Hadi M., "Decision Support Tools for ITS," Broward County TSM&O Task Team Meeting, Fort Lauderdale, FL, April 23, 2009.

15. Hadi M., "ITS Evaluation Tool," Central Florida Transportation Planning Group, Orlando, FL, February 2009.
16. Hadi, M., "ITS Evaluation Tool," RTTAC Southeast FL Modeling Committee Meeting, Fort Lauderdale, FL, October 2009.
17. Hadi, M., "National ITS Research Priority Survey," Presented at ITS America Annual Meeting in Palm Springs, CA, June 2007.
18. Hadi, M., "RITE Survey of International Research," Research, Integration, Teaching and Learning Forum Show Case, ITS America Annual Meeting, Philadelphia, PA, May 2006.
19. Hadi, M.A., "International ITS Research" Presented at ITS America Annual Meeting in Philadelphia, PA, May 2006.
20. Hadi, M.A., "The Use of Artificial Intelligence in Signal Timing Optimization," Invited Speaker to the "Artificial Intelligence Applications in Transportation Success Stories" workshop, Organized by the TRB Artificial Intelligence Committee, Washington, D.C., January 2002.
21. Hadi, M.A., "IDAS Customization for Florida," System Planning Office Model Task Force Committee Meeting, Invited Speech, Orlando, FL, May 2003.
22. Hadi, M.A., "Sketch Planning Tool for the Evaluation of ITS within the FSUTMS Modeling Environment," Central FL Planning Group Meeting, February 2009.
23. "Intelligent Transportation System Applications to Congestion Management," Florida Atlantic University, Boca Raton, FL, 2007.
24. "ITS Evaluation Tools," University of Florida, Gainesville, FL, March 2010.

PRESENTATIONS

1. Hadi, M., "Multi-Resolution Modeling Of Advanced Transportation System Management Strategies, Transpo2016, West Palm Beach, FL, December 2016.
2. Hadi, M., "Data Analytics and Modeling Tools to Support TSM&O Operations," ITS Florida Annual Meeting Orlando, FL December 2014.
3. Hadi, M., "Multi-Level Evaluation of the benefits of Intelligent Transportation Systems Presented at ITS World Congress, Detroit, MI, September 2014.
4. Ackert, M., M. Hadi, X. Chen, "Concept for Commuter Express Lanes on an Urban Arterial through Signal Priority," Presented at ITS World Congress, Detroit, MI, September 2014.
5. Hadi, M., Y. Xiao, T. Wang, "IRISDS: a Web-Based System for Information Sharing and Decision Support," Presented at ITSA annual Meeting, Nashville, Tennessee, April, 2013.
6. Hadi, M., "Prediction of Incident Impacts for Traffic Management Center Operations," Presented at the ITS Florida Technology Forum, Orlando, FL, June 2012.
7. Hadi, M., "Prediction and Visualization of Incident Impacts for Real-Time Traffic Management Center Operations," Presented at ITSA annual Meeting, Washington, D.C., May, 2012.
8. Hadi, M., Y. Xiao, and M. Rojas, "Estimation of Diversion Rate during Incidents Based on Mainline Detector Data," Presented at Transpo2012, Bonita Springs, October 2012.
9. Hadi, M., Y. Xiao, and T. Wang, "Utilization of ITS Data for off-Line and Real-Time Assessment of Transportation System Performance," Bonita Springs, October 2012.
10. Hadi, M., Y. Xiao, T. Wang, and C. Zhan, "Comparison of Real-Time Prediction of Incident Impacts Utilizing Data-Driven Modeling, Microscopic Simulation, and HCM Freeway Facility Procedures," 2012 TRB Midyear Meeting and Symposium on Innovations in Traffic Flow Theory, Highway Capacity and Quality of Service, Fort Lauderdale, Florida, June 2012.
11. Xiao, Y., M. Hadi, and H. Ozen, "Evaluating the Impacts of Incident Management Using ITS Data Capture and Performance Management Tool." Presented at the 2012 TRB Midyear Meeting and Symposium on Innovations in Traffic Flow Theory, and Highway Capacity and Quality of Service, Fort Lauderdale, Florida, June 2012.

12. Hadi, M., C. Zhan, P. Alvarez., and A. Krishnamurthy, "Interfacing Simulation Models and Traffic Management Center Operations" Presented at ITS World Congress, Orlando, FL, December 2011.
13. Hadi, M., A. Krishnamurthy, and D. Chen, "Decision Support Tools Based on ITS Data Archives," Presented at Transpo2010, Jacksonville, FL, December 2010.
14. Hadi, M., A. Krishnamurthy, and D. Chen, "Decision Support Tools Based on ITS Data Archives," Presented at ITS America Annual Meeting, Houston, TX, May 2010.
15. Brauer, T. and M. Hadi, "State of the Practice Regional ITS Evaluation Tools", Association of Metropolitan Organization (AMPO) Annual Conference, Savannah, GA, October 2009.
16. Xiao,, M. Hadi, H. Ozen, and V. Mysore, "Evaluation of the Benefits and Costs of Advanced Traveler Information Systems, " Presented at ITS America Annual Meeting, Washington, DC, June 2009.
17. Hadi, M. and V. Mysore, "An Intelligent Transportation System Evaluation Tool in the FSUTMS Regional Demand Modeling Environment," Presented at the TRB Transportation Planning Application Conference, Washington, DC, May 2009.
18. Hadi, M., and V. Mysore, "Sketch Planning Tool for the Evaluation of ITS within the FSUTMS Modeling Environment," Presented at Transpo2008, Orlando, FL, December 2008.
19. Hadi, M., P. Sinha, and H. Ozen, "Effect of Pavement Marking Contrasts on the Performance of Vision-Based Lane Departure Warning Systems," Proceedings of the 15th World Congress on ITS, New York, November 2008.
20. Zhan, C., A. Gan, and M. Hadi, "M5P Tree Algorithm for Predicting Lane Clearance Time of Freeway Incidents" Proceedings of the 14th ISSAT International Conference on Reliability and Quality in Design, Orlando, FL, August 2008
21. Yang, S., and M. Hadi, "Combining Service Patrol and Crash Data for Use in Highway Safety and Operational Analyses," Proceedings of the 14th ISSAT International Conference on Reliability and Quality in Design, Orlando, FL, August 2008.
22. Zhan, C., A. Gan, M. Hadi, and L. Shen, "Identifying Secondary Crash Characteristics on South Florida Freeways," Proceedings of the 10th International Conference for Applying Advanced Technologies in Transportation, Athens, Greece, June 2008
23. Corbin, S., M. Hadi, C. Zhan, and D. Chen, "Benefit-Cost Analysis of the SMART SunGuide Freeway Management Operations in Fort Lauderdale-Florida," Presented at the 1st International Symposium on Freeway and Tollway Operations, Athens, Greece, June 2006.
24. Corbin, S. and M. Hadi, "Selection of Operation Parameters of Service Patrol Programs," Presented at the 1st International Symposium on Freeway and Tollway Operations, Athens, Greece, June 2006.
25. Hadi, M, P. Sinha, and J. Schuerger, "Assessment of Lane Departure Warning Systems that are based on Image Recognition," Presented at Transpo2006, Palm Harbor, FL, December 2006.
26. Hadi, M.A., "Updating IDAS Parameters for Use in the Evaluation of ITS Alternatives in Florida," Presented at the FDOT's Annual ITS Working Group Meeting, Miami, Florida, March 2005.
27. Hadi, M., "Coordinated Traffic Responsive Ramp Metering Strategies – An Assessment Based on Previous Studies," Proceedings of the 12th World Congress on ITS, San Francisco, CA, November 2005.
28. Hadi, M., D. Quigley, P. Sinha, and L. Hsia "Using IDAS as Part of the Ranking Process of ITS Deployment Alternatives," Proceedings of the 12th World Congress on ITS, San Francisco, CA, November 2005.
29. Hadi, M.A. and A. Hamad, "SCRITS Benefit-Cost Analysis for Signal Systems," Presented at the 2004 ITE Annual Meeting, Orlando, FL, August 2004.
30. Hadi, M., "Experience of Signal Control Agencies with Adaptive Control in North America," Proceedings of the Intelligent Transportation of America Annual Meeting, Long Beach, CA, May 2002.

31. Hadi, M. and B. McQueen, "Use of Technology Review for Identification of ITS Market and Equipment Packages," Proceedings of the Intelligent Transportation of America Eleventh Annual Meeting, Miami Beach, FL, June 2001
32. Hadi, M.A. and P. Sinha, "Effect of Calibration on Simulation Model Freeway Link Capacities," Presented at Transpo2004, Jacksonville, FL, December 2004.
33. Hadi, M.A. and A. Badgett, "Identification of User Service Requirements to Support Hurricane Evacuation," Presented at the Intelligent Transportation of America Eleventh Annual Meeting, Miami Beach, FL, June 2001.
34. Robbins, C.J. and M.A. Hadi, "Decision Support and Navigation Tools for State and Local ITS Architectures," Presented at Transpo2000, Kissimmee, FL, April 2000.
35. Thacker, J. and M.A. Hadi, "ITS Application to Access Management: Dynamic Median Opening Modification," Proceedings of the Institute of Transportation Engineers Annual Meeting, Chicago, IL, August 2001.
36. Hadi, M.A. and C.E. Wallace, "Treatment of Saturated Conditions Using TRANSYT-7F," Proceedings of the 65th Annual Meeting of the Institute of Transportation Engineers, Denver, Colorado, August 1995.
37. Hadi, M.A. and C.E. Wallace, "Major Enhancements to TRANSYT-7F," Proceedings of the 4th International Conference on Microcomputers in Transportation, American Society of Civil Engineers, Baltimore, Maryland, July 1992.
38. Hadi, M.A. and C.E. Wallace, "Improved Optimization Efficiency in TRANSYT-7F," Proceedings of the 33rd TIMS/ORSA Joint National Meeting, Orlando, Florida, April 1992.

GOVERNMENT REPORTS

FINAL SPONSORED RESEARCH REPORTS

1. Hadi, M., X. Chen, T. Wang, and Y. Xiao. Selection of Signal Timing Plans based on System Performance Measurement. Final Report, Prepared for Florida Department of Transportation District 6, September, 2016.
2. Hadi, M., T. Wang, and Y. Xiao. SW 8th Street Adaptive Signal Control Before-Condition Evaluation. Final Report, Prepared for Florida Department of Transportation District 6, September, 2016.
3. Hadi, M., Y. Xiao, T. Wang, and S. Noei, FDOT District 6 Evaluations of Video Analytic Technologies. Final Report. Prepared for Florida Department of Transportation District 6, January, 2016.
4. Hadi, M., Y. Xiao, T. Wang, S. Fakharian Qom, L. Azizi, J. Jia, A. Massahi, S. Iqbal. Framework for Multi-Resolution Analyses of Advanced Traffic Management Strategies. Final Report. Prepared for Florida Department of Transportation, November, 2016.
5. Hadi, M.A. et al., "Decision Support Systems for Transportation System Management and Operations (TSM&O)," Final Report produced for FDOT Research Center contract BDV29-977-09, November 2015.
6. Hadi, M., Y. Xiao, and T. Wang, "SW 8th Street Adaptive Signal Control Evaluation Plan," Final Report Prepared for FDOT District 6, January 2015.
7. Hadi, M., Y. Xiao, S. Fakharian Qomn, E. Cabrera, "Performance Measurements of Transportation Systems Based on Fine-Grained Data Collected by AVI and AVL Systems," Final Report, National Center for Transportation Systems Productivity and Management, USDOT University Transportation Center, Atlanta, GA, June 2014.
8. Hadi, M., L. Elefteriadou, Y. Xiao, A. Kondyli, A. Darroudi, C. Letter, "Investigation of ATDM Strategies to Reduce the Probability of Breakdown," Final Report, Southeastern Transportation

- Research, Innovation, Development & Education Center (STRIDE), USDOT University Transportation Center, Gainesville, FL, September 2014.
9. Hadi, M., Y. Xiao, T. Wang, P. Hu, J. Jia, R. Edelstein, A. Lopez “Pilot Testing of SHRP 2 Reliability Data and Analytical Products,” Final Report Prepared for the TRB SHRP 2 Reliability Program, Washington, D.C., May 2014.
 10. Hadi, M., S. Shabaniyan, H. Ozen, Y. Xiao, M. Doherty, C. Segovia, and H. Ham “Application of Dynamic Traffic Assignment to Advanced Managed Lane Modeling,” Prepared for FDOT Research Center, Final Research Report, Prepared for FDOT Research Center, January 2014.
 11. “Coordinated Pre-preemption of Traffic Signals to Enhance Railroad Crossing Safety in Urban Areas,” Prepared in Collaboration with USF for FDOT Research Center, February 2014.
 12. Hadi, M., Y. Xiao, C. J. Zhan, and P. Alvarez, “Integrated Environment for Performance Measurements and Assessment of Intelligent Transportation Systems Operations”, Final Research Report, Prepared for FDOT Research Center, July 2012.
 13. Hadi, M., H. Ozen, S. Shabaniyan, Y. Xiao, W. Zhao, F. W. Ducca, and J. Fennessy, “Use of Dynamic Traffic Assignment in FSUTMS in Support of Transportation Planning in Florida”, Final Research Report, Prepared for FDOT Research Center, June 2012.
 14. Hadi, M., Y. Xiao, T. Wang, C. J. Zhan, H. Ozen, and E. Cabrera “Integrated Corridor Management and Advanced Technologies for Florida”, Final Research Report, Prepared for FDOT Research Center, February 2013.
 15. Hadi, M. and H. Ozen, “Arterial Travel Time – Comparison of Bluetooth and Inrix Data,” Prepared for FDOT District 6, November 2012.
 16. Hadi, M., Y. Xiao, and C. Zhan, “Development of Software to Support ITS Data Visualization and Incident Alarms”, Final Report Prepared for FDOT District 4, March 2012.
 17. Hadi, M., Y. Xiao, and C. Zhan, “Incident Delay Estimation and Associate Benefits”, Final Report Prepared for FDOT District 4, March 2012.
 18. Hadi, M., Chengjun Zhan, and Patricio Alvarez, “Traffic Management Simulation Development,” Prepared for FDOT Research Center, February 2011.
 19. Hadi, M., Yan Xiao, Chengjun Zhan, and Huijing Qiang, “Decision Support Tools to Support the Operations of Traffic Management Centers,,” Prepared for FDOT Research Center, February 2011.
 20. Hadi, M., Halit Ozen and Wei Zhao, “Use of Advanced Analysis Tools to Support Freeway Corridor Freight Management,” Prepared for FDOT Research Center, September 2010.
 21. Hadi, M., C. Zhan, and H. Qiang, “Arterial Travel Time and Incident Detection – Review of Technologies and Strategies,” Prepared for FDOT District 6, October 2010.
 22. Hadi, M., W. Wu, F. Cevallos, “Animal Shelter Facility Traffic Study,” Prepared for the Miami-Dade County Public Works Department, April 2011.
 23. Hadi, M., C. Diaferia, and H. Ozen “US-1 Intersection Improvement Study,” Report Prepared for Miami-Dade County, April 2009.
 24. Hadi, M., Y. Xiao, H. Ozen, P. Alvarez, ”Evaluation Tools to Support ITS Planning Process,” Prepared for FDOT Research Center, October 2008.
 25. Hadi, M. and C. Diaferia, “US-1 Intersection Improvement Study,” Report Prepared for Miami-Dade Metropolitan Planning Organization and the Village of Pine Crest, April 2008.
 26. Hadi, M., P. Sinha, J. Shuerger, and J. Easterling, “Lane Marking/Striping to Improve Image Processing Lane Departure Warning Systems,” A Report Produced for the Cooperative Vehicle Highway Automation Systems (CVHAS) Program, Sacramento, CA, 2007.
 27. Hadi, M. and C. Zhan, “Benefit-Cost Analysis of FDOT District 4 SMART SunGuide ITS Operations, Prepared for Florida Department of Transportation (FDOT) District 4, Fort Lauderdale, FL, January 2006.
 28. Hadi, M.A., D. Quigley, P. Sinha, A. Krishnamurthy, and L. Hsia, “Intelligent Transportation Systems Deployment Analysis System Customization,” Prepared for the Florida Department of Transportation by PBS&J ITS Division, Tallahassee, Florida, 2005.

29. Wallace, C.E., K.G. Courage, M.A. Hadi and A.C. Gan, "Methodology for Optimizing Signal Timing (M/O/S/T), Volume 4: TRANSYT-7F Release 8 Users Guide," Prepared for the Federal Highway Administration, COURAGE AND WALLACE, Gainesville, Florida, March 1998.
30. Wattleworth, J., M. Hadi, J. Aruldhas, L.F. Chow, A.C. Gan, "Relationship of Highway Design Standards to Accidents, Injuries and Fatalities," Final Report prepared for the Florida Department of Transportation by the University of Florida Transportation Research Center, Gainesville, Florida, March 1995.
31. "National ITS Architecture Development – Phase I," Prepared for Federal Highway Administration by the Westinghouse Team, Washington, D.C., 1993.
32. Wallace, C.E., K.G. Courage, and M.A. Hadi, "Methodology for Optimizing Signal Timing (M/O/S/T), Volume 4: TRANSYT-7F Release 7 Users Guide," Prepared for the Federal Highway Administration, COURAGE AND WALLACE, Gainesville, Florida, December 1991.
33. Hadi, M.A. and C.E. Wallace, (Editors and Authors), "Intelligent Vehicle Highway Systems (IVHS), State-of-the-Art for Florida," Prepared for the Florida Department of Transportation by the University of Florida Transportation Research Center, Gainesville, Florida, January 1992.
34. Hadi, M.A. and K.G. Courage, "Development of Optimal Threshold Parameters for Traffic Responsive Control in Arterial Signal Systems," Prepared for the University Transportation Centers Program and the Florida Department of Transportation by the University of Florida Transportation Research Center, Gainesville, Florida, January 1990.

INDUSTRY REPORTS

1. Hadi, M.A. and J. Sorenson, "Manatee County Advanced Traffic Management System Design-Build Criteria Package Development -- Technical Requirements," Prepared for the Florida Department of Transportation by PBS&J ITS Division, Bartow, Florida, 2005.
2. Badgett, A., D. Lewis, and M.A. Hadi, "Southeast U.S. Hurricane Evacuation Study," Prepared for the U.S. Corp of Engineers by PBS&J ITS Division, 2001.
3. "Predictive Travel Time Orange Book," ITS Orange Book, Issue No. 2, PBS&J, Orlando, FL, 2003.
4. Hadi, M.A. "ITS Standard Application Plan-- ITS Corridor Master Plans for Florida's Principal FHHS Limited-Access Corridors," Prepared for the Florida Department of Transportation by the PBS&J ITS Division, Tallahassee, Florida, 2002.
5. Hadi, M.A. and P. Sinha, "Florida Intelligent Transportation Systems (ITS) Standards Implementation Plan," Prepared for the Florida Department of Transportation by the PBS&J ITS Division, Tallahassee, Florida, 2003.
6. Hadi, M.A., "I-95/I-595 Video Monitoring and Detection System Technical Requirements," Prepared for the Florida Department of Transportation by the PBS&J ITS Division, Fort Lauderdale, Florida, 2003.
7. Hamad, A., J. Sorenson, and M.A. Hadi, "Sarasota-Manatee County ATMS Mater Plan and Conceptual Design," Prepared for the Florida Department of Transportation by the PBS&J ITS Division, Bartow, Florida, 2004.
8. Hadi, M.A., "Evacuation Coordination User Service Development," Prepared for the Florida Department of Transportation by PBS&J ITS Division, Tallahassee, Florida, 1999.
9. McConnell, J., M.A. Hadi, and V. Reddy "Intelligent Transportation Systems (ITS) Corridor Plan for Interstate I-75," Prepared for the Florida Department of Transportation by TEI engineers & Planners and PBS&J, Fort Lauderdale, FL, 2003.
10. Hadi, M.A., "SR 836 Corridor ITS Design-Build Project Technical Requirements," Prepared for the Miami-Dade Expressway Authority (MDX) by PBS&J, Miami, Florida, 2002.
11. Hadi, M.A., "ITS Corridor Concept Plans for Florida's Principal FHHS Corridors – Technology Review," Prepared for the Florida Department of Transportation by PBS&J ITS Division, Tallahassee, Florida, 2001.

12. Robbins, C., and M.A. Hadi, "US 19/S.R. 55 ATMS Feasibility Study," Prepared for the Florida Department of Transportation by PBS&J ITS Division, Tampa, Florida, 1999.
13. Hadi, M.A. and D. Millar, "Colorado Department of Transportation Regions 4 and 6 Signal System Conceptual Design," Prepared for the Denver Regional Council of Governments, Denver, Colorado, 2001.
14. Hadi, M.A. and C. Bausher, "Recommendations for TranStar Database Modifications With Considerations of Emergency Management Standards and Architecture," Prepared for the Texas Department of Transportation (TXDOT), Houston, Texas, 2002.
15. "Town of Cary Computerized Traffic Signal System Feasibility Study," Prepared for the Town of Cary by PBS&J, March 2001.
16. Hadi, M.A. and R. Alqasem, "ITS Concept Design of the SR 826 Corridor," Prepared for the Florida Department of Transportation by PBS&J, Miami, Florida, 1999.
17. Hadi, M.A., P. Sinha, and A. Hamad, "Evaluation Study for the US 19 Corridor Adaptive Control -- Test Results For the Before Deployment Conditions," Prepared for Florida Department of Transportation by H.W. Lochner and PBS&J, Tampa, Florida, 2002.
18. Hadi, M.A. and R. Alqasem, "Luiz Munoz Rivera International Airport San Juan Taxiway Crossing Alternative Study," Prepared for Puerto Rico by PBS&J, San Juan, Puerto Rico, 1999.

SOFTWARE DEVELOPMENT

1. Development of the ITS Data Capture and Performance Management (ITSDCAP), Software Tool, 2010-Present.
2. Development of the Integrated Regional Information Sharing and Decision Support (IRISDS), Software Tool, 2010-2012.
3. Development of Integrated Support System for Traffic Assignment (ISSTA), Software Tool, 2010-2012.
4. Development of Florida ITS Evaluation (FITSEVAL) Software Tool, 2007-2008.
5. Development of several versions and modules of the TRANSYT-7F signal timing optimization program, 1987-1995.
6. SunGuide Simulation Support (SunSim) – Support of SunGuide TMC software using simulation.

FUNDED RESEARCH

1. PI, Testing of a Vision-Based Warning System on Transit Vehicles, sponsored by the FDOT Central Office (December 2016 – Present).
2. PI, ITS (Vehicle Detector) Technology Research, sponsored by FDOT District 6 (November 2016 – Present).
3. PI, Using Empirical Data for Project Post-Deployment Evaluation, sponsored by Federal Highway Administration, (October 2015 – present).
4. PI, FDOT District Six Evaluation of Video Analytic Technologies, sponsored by FDOT District 6, (July 2015-January 2016).
5. PI, Guidelines for the Evaluation of Ramp Signaling Deployments in a Real-Time Operations Environment, sponsored by FDOT Research Center (January 2016-present).
6. PI, Utilization of Connected Vehicle Data to Support Traffic Management Decisions, sponsored by FDOT Research Center, (February 2015- Present).
7. PI, Framework to Support Transportation Agency ITS Infrastructure and ITS Legacy Decisions with Consideration of Connected Vehicle Deployment and Autonomous Vehicle and Automated Vehicle

- Initiatives, Sponsored by NCHRP program, Transportation Research Board, (September 2015-present).
8. PI, Framework for Multi-Resolution Analyses of Advanced Traffic Management Strategies sponsored by FDOT Research Center, (November 2014- December 2016).
 9. PI, Decision Support Systems for Transportation System Management and Operations (TSM&O), sponsored by FDOT Research Center, (August 2013-November 2015).
 10. PI, Selection of Signal Timing Plans based on System Performance Measurement, sponsored by FDOT District 6, (April 2015-September 2016).
 11. PI, Evaluation of Adaptive Signal Timing on SW 8th Street, sponsored by FDOT District 6, April 2015-September 2016.
 12. PI, Development of SW 8th Street Adaptive Signal Control Evaluation Plan and Wi-Fi Data Processing and Validation, sponsored by FDOT District 6, (August 2014-January 2015).
 13. PI, FITSEVAL Testing and Utilization Support, sponsored by FDOT Central Office (subcontract to URS) (July 2014-December 2014).
 14. PI, FHWA DTA Training Workshop, sponsored by Federal Highway Administration, (March 2014-November 2014).
 15. PI, Signal Timing Optimization with Consideration of Environmental and Safety Impacts, sponsored by USDOT STRIDE University Transportation Center (UTC) (January 2014-present).
 16. PI, Dynamic Traffic Control Interventions for Enhanced Mobility and Economic Competitiveness, sponsored by USDOT STRIDE University Transportation Center (UTC) (January 2014-January 2016).
 17. PI, Cooperative Vehicle-Highway Automation (CVHA) Technology: Simulation of Benefits and Operational Issues, sponsored by USDOT NCTSPM UTC, (June 2014-present).
 18. PI, UniversityCity Prosperity Project 2014 Work Plan Development for Phase 1 of the ITPA, sponsored by Miami-Dade Expressway Authority, \$265,000 (February 2014-July 2014).
 19. Steering Committee of the STRIDE project and student travel, sponsored by USDOT STRIDE UTC (January 2012-Present).
 20. PI, "Intelligent Transportation Systems (ITS) ePrimer- Module 4" Sponsored by US DOT, (October 2012-August 2013).
 21. PI, "Pilot Testing of SHRP 2 Reliability Data and Analytical Products," sponsored by the TRB SHRP 2 Reliability Program, (March 2013-May 2014).
 22. PI "Application of Dynamic Traffic Assignment to Advanced Managed Lane Modeling," sponsored by FDOT Research Center (May, 2012-January 2014).
 23. PI, Demonstration of the Use of Decision Support Tools at Florida Traffic Management Centers, Sponsored by FDOT Research Center, (February 2012, February 2013)
 24. PI "Application of Dynamic Traffic Assignment to Advanced Managed Lane Modeling," FDOT Research Center, (May 15, 2012-January 2014)
 25. PI, "Investigation of ATDM Strategies to Reduce the Probability of Breakdown," USDOT STRIDE UTC, FIU Lead and UF sub, (June 2012-September 2014).
 26. PI, "Performance Measurements of Transportation Systems based on Fine-Grained Data Collected by AVI and AVL Systems," USDOT NCTSPM UTC, FIU Lead and UCF sub, (June 2012- June 2014)
 27. PI, "Optimizing Emergency Management Systems Through the Use of ITS Technologies," USDOT GT UTC, UAB Lead and FIU sub, (June 2012-present).
 28. PI, FSUTMS Training Workshops for 2011/2012 –FITSEVAL, PB Americas, (September 2011- June 2012).
 29. PI, "Florida ITS- Evaluation Tool Integration with FSUTMS", PB Americas, (October 2011- June 2012).
 30. PI, "Coordinated Pre-preemption of Traffic Signals to Enhance Railroad Crossing Safety in Urban Areas," sponsored FDOT project subcontract to USF, (May 2012-August 2013)
 31. PI, Use of Dynamic Traffic Assignment in FSUTMS in Support of Transportation Planning in Florida, sponsored by FDOT Research Center (Period: July 2010 – July 2012)

32. Principal Investigator (PI), Integrated Environment for Performance Measurements & Assessment of ITS Operations, sponsored by FDOT Research Center (Period: July 2010 – July 2012)
33. PI, Integrated Corridor Management and Advanced Technologies for Florida, sponsored by FDOT Research Center (Period: July 2010 – July 2012).
34. PI, Detection Technologies and Algorithms for Arterial Streets Phase 2, sponsored by FDOT District 6 (Sub-contractor to AECOM) (Period: April 2010 – December 2011).
35. PI, Development of Software to Support ITS Data Visualization and Incident Alarms, Sponsored by FDOT District 4 (Period: May 2011 – September 2011).
36. PI, Incident Delay Estimation and Associate Benefits, sponsored by FDOT District 4 (Period: May 2011 – September 2011).
37. PI, Animal Shelter Facility Traffic Impact Study, sponsored by the Miami-Dade County Public Works Department, (Period: January 2011 – April 2011).
38. PI, Animal Shelter Facility Traffic Impact Study, Sponsored by the Miami-Dade County Public Works Department, (Period: February 2011 – May 2011).
39. Principal Investigator (PI), Decision Support Tools to Support the Operations of Traffic Management Centers, sponsored by FDOT Research Center (Period: July 2008 – January 2011).
40. PI, Traffic Management Simulation Development, sponsored by FDOT Research Center (Period: July 2008 – March 2011).
41. PI, Use of Advanced Analysis Tools to Support Freeway Corridor Freight Management, sponsored by FDOT Research Center (Period: August 2008 – August 2009)
42. PI, Partnership to Develop an Integrated, Advanced Travel Demand Model and a Fine-Grained Time-Sensitive Network, Sponsored by Strategic Highway Research Program 2 (SHRP2) Project C10, The National Academies (Sub-contractor to Resource Systems Group) (Period: February 2010 – February 2012).
43. PI, Detection Technologies and Algorithms for Arterial Streets, sponsored by FDOT Research Center, Sponsored by FDOT District 6 (Sub-contractor to AECOM) (Period: December 2009 – June 2010).
44. PI, Implementation of FITSEVAL (Florida ITS Evaluation Tool), Sponsored by FDOT Central Office (Sub-contractor to Cambridge Systematics) (Period: January 2010 – September 2010).
45. PI, Optimization of Service Patrol Parameters, Sponsored by FDOT District 4 (Period: October 2009 – August 2010).
46. PI, Evaluation Tools to Support ITS Planning Process, sponsored by the Florida Department of Transportation (FDOT) Research Center (period: 2007-December 2008), funding: \$150,000.
47. PI, NW 68th Evaluation Study, sponsored by Miami-Dade County, Period: January 2009 to April 2009.
48. PI, Lane Marking/Striping to Improve Image Processing Lane Departure Warning Systems, sponsored by The Cooperative Vehicle Highway Automation Systems (CVHAS) Program (Federal Pool Funded Program) – Subcontract to PBS&J. Dr. Hadi was the PI for the whole PBS&J/FIU team, (period: 2004-2007).
49. PI, Benefit-Cost Analysis of Traffic Management Centers, sponsored by the Florida Department of Transportation (FDOT) District 4 (period: 2005-2006).
50. PI, Optimization of Service Patrol Operations, sponsored by the Florida Department of Transportation (FDOT) District 4 (period: April 2008-present).
51. PI, US-1 Improvement Study, sponsored by Miami-Dade Metropolitan Planning Organization (period: 2007-April 2008).
52. PI, Research Support of FDOT District 6 ITS Operations, sponsored by the Florida Department of Transportation (FDOT) District 6 – Subcontract to DMJM HARRIS: (Period: March 2008- present)
53. PI, Support of Florida ITS Architecture (SITSA) Development, sponsored by the Florida Department of Transportation (FDOT) Central Office ITS Division - Subcontract to PBS&J (period:2006).
54. Co-PI (Albert Gan is the PI), Prediction of Incident Duration, sponsored by the Florida Department of Transportation (FDOT) District 4 (Period: 2007).

55. Co-PI, Improving Severe Incident Response Vehicle (SIRV) Dispatching through Analysis of the SMART Incident Database, sponsored by the Florida Department of Transportation (FDOT) District 4 (Period: 2008).
56. PI, IDAS Customization for Use in ITS Deployment Evaluation in Florida, sponsored by the Florida Department of Transportation (FDOT) Central Office (period: 2003-2004).
57. PI, Development of a Methodology to Evaluate the Prevention of Movements at Median Openings, Sponsored by FDOT (period: 2000-2001).
58. PI, Development of Criteria to Determine Right-Turn Volumes Requiring Deceleration Lanes at Unsignalized Intersections, Sponsored by FDOT (Period: 2002).
59. PI, Evaluation of the Effects of Right-Turn Conflicts with U-Turn Movements, Sponsored by FDOT (period: 2001).
60. Co-PI (Dr. Charles Wallace is PI), Development of TRANSYT-7F Releases 7 and 8, Federal Highway Administration (FHWA) and McTrans, (period: 1990 to 1995)
61. Co-PI (Dr. Charles Wallace is PI), National Study for the U.S. ITS System Architecture, US Department of Transportation, United State Department of Transportation (period: 1993-1994).
62. Co-PI (Dr. Joseph Wattleworth is PI), Relationship of Highway Design Standards to Accidents, Injuries and Fatalities, Sponsored by FDOT (period: 1993-1994).
63. Co-PI, Assessment of ITS for Florida, FDOT Central Office (period: 1992).

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

1. ITS Florida Professional of the Year Award, November 2011.
2. ITS Florida recognition for establishing the FIU ITS laboratory, May 2009.
3. ITS America recognition for ITS research needs study and student outreach activities, June 2009.
4. TRB Traffic Flow Theory Committee and Highway Capacity and Quality of Service Committee recognition for organizing the joint summer meeting in 2012.

OFFICES HELD IN PROFESSIONAL SOCIETIES

1. Chair of the Joint Simulation Subcommittee, (2016-Present)
2. Member and Chair of the Research Subcommittee, TRB Traffic Flow Theory Committee (2006-present).
3. Member of the TRB Transportation System Simulation Manual Task Group (2015 – Present).
4. Member Chair of the Research Subcommittee, TRB Intelligent Transportation Systems Committee (2007-2016).
5. Member, TRB Highway Capacity and Quality of Service Committee (2006-2015).
6. Member of ITS Florida Board of Directors and Chair of the ITS Learning Subcommittee (2011-present).
7. Chair of ITS America Research Committee (2008-present).
8. Advisor to the ITE Student Chapter of FIU (2008-2015).
9. Member of ITS America Cross Cutting Forum (2006-present).
10. Member of Florida Automated Vehicle Working Groups
11. Member of South Florida Connected and Autonomous Vehicle group

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

1. Invited by Advanced Research Projects Agency – Energy (ARPA-E) as a reviewer for the TRANSNET program - Traveler Response Architecture using Novel Signaling for Network Efficiency in Transportation, 2016-2017.
2. Invited by Operations Center of Excellence to TSM&O Work Force development, Baltimore, MD, June 2016.
3. Invited to FHWA ATDM and DMA Analysis, Modeling, and Simulation (AMS) review group.
4. Invited by USDOT to three ITS University Partners Workshops in Washington D.C. in 2012, 2013, 2014, 2016.
5. Invited by USDOT to Connected Vehicle Learning Need Workshop in Washington D.C. in 2014.
6. Invited as a member to the Florida Automated Vehicle (FAV) Working Groups, 2014.
7. Invited to the FHWA Sketch Planning Review Group, 2013.
8. Invited to the FHWA INFLO Connected Vehicle Impact Study Review Group, 2013.
9. Led a task group regarding the need and process for ITS Certification for ITS America, 2013.
10. Invited to participate in the USDOT University Support for Operations Effort, 2013.
11. Organizer of the Joint TRB Traffic Flow Theory Committee and Highway Capacity and Quality of Service Committee Summer Meeting, Fort Lauderdale, FL, 2012.
12. Developer of problem statements for the TRB Traffic Flow Theory Committee, TRB ITS Committee, and TRB Simulation Subcommittee.
13. Reviewer of documents for the Highway Capacity Manual (HCM), 2010 and 2015 updates.
14. Invited to the FHWA Guidebook on Utilization of Dynamic Traffic Assignment Modeling Peer Review Group, 2011.
15. Organizer and moderator of “Student Involvement in ITS session” in the ITS World Congress in Orlando in December 2011.
16. Reviewer of Best ITS Project Awards, ITS America, 2010.
17. Organizer of a student paper competition and a poster session as part of the 15th World Congress on ITS, New York, 2008.
18. Invited member of the Integrated Corridor Management (ICM) Modeling Focus Group that advised Federal Highway Administration (FHWA) on how to model ICM (2006).
19. Invited member of the reviewing panel of FHWA project on simulation performance measures (2006).
20. Invited Member of NGSIM User Group that advises the FHWA regarding the Next Generation Simulation (NGSIM) model development (2003).
21. Leader of an ITS America project to increase student involvement in ITS (2007-2008).
22. Leader of an ITS America survey of the need for international ITS research information sharing (2005-2006).
23. Leader of an ITS America project to identify ITS research needs based on ITS America forum member inputs (2006-2007).
24. Paper reviewer for TRB meetings and journal; *ASCE Journal of Transportation Engineering*; *IEEE Transactions on ITS*, *Transportation Research Part A* and *Part C*, *Journal of Intelligent Transportation Systems*, and several other journals and conferences.
25. Organizer of and presided on several sessions at the TRB annual meeting, ITS World Congress, ITS America annual meeting, and ITS Florida meetings.
26. Organizer of Lunch and Learn Activities for ITS Florida, Miami, FL, 2009-present.