

EVANGELOS I. KAISAR, PH.D.

CURRENT POSITION: Associate Professor
Director, Multimodal Intelligent Systems Laboratory (MITSL)
Director, Geomatics and Transportation Engineering Program
Director, Freight Mobility research Institute (FMRI)

ADDRESS: Florida Atlantic University
College of Engineering and Computer Science
Department of Civil, Environmental and Geomatics Engineering
Center for Intermodal Transportation Safety and Security
777 Glades Rd. Bldg. #36, Room 214
Boca Raton, Florida 33431
Telephone: (561) 297 4084
E-mail: ekaisar@fau.edu

EDUCATION

Doctor of Philosophy in Civil Engineering. Minor in Logistics
The University of Maryland of College Park, Maryland,
Dissertation Topic: A Stowage Planning Model for Multiport Container Transportation
Advisor: Dr. Ali Haghani

Master of Science in Civil Engineering
The University of Maryland of College Park, Maryland,
Dissertation Topic: Development of a Methodology for Containership Stowage Planning
Advisor: Dr. Ali Haghani

Bachelor in Civil Engineering
1) *The University of Maryland of College Park, Maryland,*
Graduated with "Honors"

2) *NTIA, Athens Greece,*
B.S. Thesis: Design and Layout of an isolated Urban Intersection
Graduated with "Highest Honors"

PROFESSIONAL INTERESTS

Transportation Network Modeling and Optimization
Mathematical and Large-scale Simulation Modeling
Emergency Response, Infrastructure Resilience/ Supply Chain Security
Transportation Management
Innovative Highway Geometric Design and Simulation
Freight Transportation and Logistics/Container Transportation
Transit Network Planning and Design
System Engineering and Integration

ACADEMIC POSITIONS

Florida Atlantic University
College of Engineering and Computer Science
Department of Civil, Environmental and Geomatics Engineering
Boca Raton, FL 33431

Associate Professor of Civil Engineering, June 2012 to present

Serving as an Associate Professor of Civil, Environmental and Geomatics Engineering and Director for Geomatics and Transportation Engineering Program at the Florida Atlantic University. Duties include teaching undergraduate and graduate courses in transportation engineering, logistics, supervision of master thesis, and conducting research (e.g. Mitigation studies sponsored by Federal Emergency Management Agency (FEMA), Transit operations sponsored by Federal Transit Administration, Infrastructure resilience sponsored by Department of Homeland Security, etc) In addition, Dr. Kaisar has a proven record of effectively developing and managing the Geomatics and Transportation Engineering program that makes impact through research, education and technology transfer activities.

Director, Geomatics and Transportation Engineering Program, Fall 2012 to present

Serving as Director in Geomatics and Transportation Engineering Program that has been a domain-defining leader and much-emulated model for cross-disciplinary research and education in transportation arena. Dr. Kaisar is working actively with its key stakeholders, reach out to new ones and form new alliances to remain at the cutting edge in a field and in the nation.

Assistant Professor of Civil Engineering, August 2006 to June 2012

Serving as an Assistant Professor of Civil, Environmental and Geomatics Engineering at the Florida Atlantic University. Duties include teaching undergraduate and graduate courses in transportation engineering, logistics supervision of master thesis, and conducting research (e.g. Mitigation studies sponsored by Federal Emergency Management Agency (FEMA), Public transportation and planning sponsored by Federal Transit Administration, Preparedness and Catastrophic Events Management sponsored by Department of Homeland Security, Traffic Operation and Climate Change sponsored by Florida Department of Transportation, etc.) New graduate courses developed and taught in the following areas: Transportation Operations and Safety, Marine Transportation, Air Transportation, Sustainable transportation, Transportation Planning, Supply Chain Management, Transportation Logistics and Management. Courses that I was teaching as a part of my faculty duties with the university include:

Undergraduate Courses:

TTE 3004 Introduction to Transportation Engineering (Including Laboratory)
TTE 4005 Transportation Planning and Logistics
TTE 4105 Transportation Operations and Logistics Management

Graduate Courses:

Highway Traffic Characteristics & Measurements, Geometric Design, Airport Planning and Design, Freight Operations and Logistics, Transportation Systems Analysis, Quantitative Methods in Transportation Engineering, Transportation Logistics and Supply Chain Management, Maritime Freight and Cargo, Transportation and Supply Chain Systems, Supply Chain and Logistics Management, Maritime Freight Transportation, Public Transportation Systems, Urban Public Transportation

University of Maryland of College Park

A. James Clark School of Engineering
Institute of System Research (ISR)
College Park, MD 20742

Research Affiliate (2006 –Present)

Participation in research projects, etc.

RESEARCH AND WORK EXPERIENCE

**Project Manager - Transportation Engineer III
Maryland Transportation Authorities**

2005- Aug. 2006

Lead a group of engineers that was responsible for applying and testing experimental traffic control devices, including simulation modeling and safety studies at toll plaza facilities throughout the state of Maryland.

Traffic simulation study for the prediction of the expected traffic under various tolling conditions, Testing and evaluating methodology of the “E-ZPass Purple Dots” Experiment, Coordinated Highways Action Response Team (Chart), CSX Intermodal Terminals, etc. are a few projects that I was involved and supervised.

**Graduate Research Assistant,
Department of Civil and Environmental Engineering
University of Maryland, College Park**

2001 – 2005

Intermodal and Marine Freight Transportation

My study focused on “overstowage” cost involved in stack operations in containerships, terminals, and intermodal facilities. A mixed integer formulation for containerships with complex constraints was developed. The formulation considers various constraints such as: vessel stability, port operation and crew safety. A heuristic procedure using meta-heuristic techniques to minimize container re-handling on a multi-port journey was developed. It considers the consequences of each placement at subsequent ports.

**Institute of Systems Research (ISR)
University of Maryland, College Park**

2003 – 2005

System Modeling and Analysis

An object-based model for the management of narrow passageways in transportation systems was developed to minimize traffic congestion and improve safety. In addition, this research formulates a new methodology for the incremental transformation of informal operations concepts for a waterway management system into system-level designs, the latter being formal enough to support automated validation of anticipated component – and system – level behaviors.

**Research Fellow: Federal Highway Administration
Office of Research and Development
Turner-Fairbank Highway Research Center, McLean, Virginia**

1998 – 2002

Concentration in safety and highway design to investigate the interactions of geometric design, traffic operation, and safety. Performed Federal Highway Administration (FHWA) research studies on highway safety projects including simulation and modeling, safety countermeasure evaluation methods, hardware, and safety management systems.

**Maryland State Highway Administration (MSHA)
Intelligent Transportation Systems, Division of Traffic Development, HANOVER, MARYLAND**

1998

Worked in the Coordinated Highways Action Response Team (CHART) Intelligent Transportation System (ITS); its mission was to improve efficiency and safety on major state highways through ITS technology and interagency teamwork. Developed a comprehensive database for the incident management system and traveler information for the CHART project.

**Military Service (Greek Army)
Lesvos Island, Greece
Sergeant major**

Mar.1993-June1994

Among the other duties I served as a trainer for over 150 soldiers in the logistical field under combat conditions. In addition, I developed an emergency evacuation plan for all personal and equipment value over \$10 million of dollars.

**“L” Engineering & Architecture, Inc.
Athens, Greece**

1992 and 1999

Transportation Engineer

My early research work was related to traffic operations. I developed traffic control plan for major highway systems in nation’s capital, which required detour routing road closings and coordination of public transportation system. In

addition, participation in technical projects, related to unconventional interchange designs and signal timing optimization projects.

Ioannis Kaisar, Inc. Amarousion, GREECE

1984–1999

Manager Assistant/Manager. Managed a leading marble company in Athens, Greece.

UNIVERSITY TEACHING

Teaching of undergraduate courses at the University of Maryland of College
ENCE 370 Introduction to Transportation Engineering & Planning

(2003-2005)

Teaching/Advising Award

- Florida Atlantic University, Excellence in Undergraduate Teaching Award, 2013.
- Florida Atlantic University, Excellence in Undergraduate Teaching Award Nominee, 2010 and 2011.

Teaching Evaluation

Overall Rating in Five-Point Scale (scale 1 to 5, with 1 as the highest and 5 as the lowest)
Averages of 52 Classes from fall 2012 to Present

Courses	Kaisar's Mean	Dept.'s Mean	College Mean
Graduate	1.58	2.15	2.38
Undergraduate	1.85	2.21	2.43

Teaching of undergraduate and graduate courses at Florida Atlantic University (2006-Present)

I was the very first transportation Faculty hired in the Civil Engineering Program at FAU. During the period 2006 – 2010, I developed the entire transportation engineering core curricula, taught three to four courses each semester, helped develop the transportation specialty for the 2008 and 2014 ABET accreditation visit, and successfully initiated the transportation research and graduate programs with several MS students and externally funded projects.

Undergraduate Courses at Florida Atlantic University:

TTE 4004 Transportation Engineering I (core course) - 2006 to 2008

TTE 3004 Introduction to Transportation Engineering (core course) – 2008 to 2009

TTE 4005 Transportation Engineering II (core course) – 2006 to 2009

TTE 4005 Transportation Planning & Logistics (core course) – 2009 to present

TTE 4105 Seminar in Transportation Planning and Management (elective course) 2010

TTE 4105 Transportation Operations and Logistics Management (elective course) 2011 to present

Graduate Courses at Florida Atlantic University:

Highway Engineering, Highway Traffic Characteristics and Measurements and Quantitative Methods in Transportation Engineering (core graduate courses)

Geometric Design, Airport Planning and Design, Freight Operations and Logistics, Transportation Logistics and Supply Chain Management, Transportation Systems Analysis, Maritime Freight and Cargo, Transportation and Supply Chain Systems, Supply Chain and Logistics Management, Maritime Freight Transportation, Public Transportation Systems, Urban Public Transportation

- **Total Number of Students Taught at FAU: 1477**
- **Number of Different Courses Taught at FAU: 21**

Total Thesis Chairing at FAU: 32 M.S. and 2 PhD
(26 MS Students Graduated, 6 on-going)

Non-Thesis M.S.: (10 Graduated, 8 under my supervision)

Total M.S. Thesis supervisory committee: 16 students

Total PhD dissertation supervisory committee: 2 students

Directed Research in Transportation: 5 students supervised in independent study course credit

Undergraduate Volunteers and Employees: 25 students supervised

International Undergraduate Research Opportunity Program: 10 students supervised

- Robin Nieland: University of Twente, Netherlands, 2007
- J.W. Schokkin; University of Twente, Netherlands, 2008
- Ashvarya Agarwal: IIT Kharagpur, India, 2010
- Herish Patel: Nirma University, India, 2012
- Adhar Rajeshkumar, Nirma University, India, 2012
- Eric Carvalho: Brazil Scientific Mobility Program, 2014
- Aline Machado: Brazil Scientific Mobility Program, 2014
- Gustavo Madalozo Laffitte: Brazil Scientific Mobility Program, 2014
- Kellen Teles Santos: Brazil Scientific Mobility Program, 2015
- Catalina Andrea Velasquez Carrasco: Universidad Finis Terrae, Chile, 2015

Courses Taught:

Course Number	Course Name	Number of Sections	Number of Students	University
Undergraduate Courses				
TTE 4004	Transportation Engineering I	4	223	Florida Atlantic University
TTE 3004	Introduction to Transportation Engineering	2	90	Florida Atlantic University
TTE 4005	Transportation Engineering II	5	156	Florida Atlantic University
TTE 4005	Transportation Planning & Logistics	15	417	Florida Atlantic University
CGN 2327	Fundamentals of AutoCad	4	99	Florida Atlantic University
ENCE 370	Introduction to Transportation Engineering	3	75	University of Maryland
TTE 4105	Seminar in Transportation Planning & Management	5	72	Florida Atlantic University
TTE 4105	Transportation Operations & Logistics Management	4	57	Florida Atlantic University
Graduate Courses				
TTE 6815	Highway Engineering	2	12	Florida Atlantic University
TTE 6536	Airport Planning & Design	1	7	Florida Atlantic University
CGN 6930	Maritime Freight and Cargo	3	21	Florida Atlantic University
CGN 6930	Highway Traffic Characteristics & Measurements	3	22	Florida Atlantic University
CGN 6930	Freight Operations and Logistics	2	15	Florida Atlantic University
CGN 6905	Directed Independent Study	6	10	Florida Atlantic University
CGN 6930	Transportation Systems Analysis	2	12	Florida Atlantic University
CGN 6930	Quantitative Methods in Transportation Engineering	2	17	Florida Atlantic University
CGN 6930	Urban Public Transportation	2	15	Florida Atlantic University
CGN 6930	Transportation and Supply Chain Systems	1	13	Florida Atlantic University
CGN 6930	Supply Chain and Logistics Management	2	37	Florida Atlantic University
CGN 6930	Public Transportation Systems	2	19	Florida Atlantic University
CGN6930	Adv. Transportation Operation and Mgmt.	1	17	Florida Atlantic University
CGN 6930	Transportation Logistics and Supply Chain Management	2	71	Florida Atlantic University
Total	22 Courses	73	1477	2 Universities

PUBLICATIONS

More than 150 Scientific Publications including 2 Diploma Theses, 1 Doctoral Dissertation, 1 Book (under contract), more than 2 chapters in Books, more than 20 publication in peer-reviewed scientific journals, many publications in refereed national and international conferences, 40 presentations in conferences, international committee meetings, and workshops. These publications have attracted hundreds of citations from other researchers.

SELECTED JOURNAL PUBLICATIONS (2006 – PRESENT: DURING FAU TENURE)

1. **Kaisar E.**, Teegavarapu, R., and Gundersen E., “Data Envelopment Analysis Model for Assessment of Safety and Security of Intermodal Transportation Facilities” *Journal of Traffic and Transportation Engineering* (accepted to be appear).
2. Soltani-Sobh A., Heaslip k., Scarlatos P., and **Kaisar E.**, “Reliability Based Pre-Positioning of Recovery Centers for Resilient Transportation Infrastructure”, *International Journal of Disaster Risk Reduction*, Sept, 2016.
3. **Kaisar E.**, Coolahan J., Koomullil R., and Averkiou P., “Infectious Disease and Hospital Surge Capacity Impacts on Urban Transportation”, *International Journal of Transportation*, Vol 4, No. 2, pp-15-30, Aug. 2016.
4. Zhao Y. and **Kaisar E.**, “Modeling and Simulation on Yard Trailers in a Maritime Terminal”, *Journal of Logistics Engineering and Management*, (2014).
5. Stevanovic A., Olarte C., Gallettebeitia a., Gallettebeitia B., and **Kaisar E.**, “ Testing Accuracy and Reliability of MAC Readers to Measure Arterial Travel Times”, *Journal of International intelligent Transportation System Research*, (2014).
6. Parr S., **Kaisar E.**, and Stevanovic A., “ Applications of Transit Signal Priority for No-Notice Urban Evacuation”, *ASCE, Natural Hazards Rev.* 10.1061, June 2013.
7. Golias M.M., Portal M.I., Konur D., **Kaisar E.**, and Kolomvos G., “Robust berth scheduling at marine container terminals via hierarchical optimization.” *Journal of Computers and Operations Research*, art. Number: 3378, (2013).
8. Stevanovic, A.Z., Kergaye, C., and **Kaisar, E.** “Field Evaluation of Signal Timings Developed by a Stochastic Signal Optimization Tool.” *Journal of Road and Traffic Engineering – Journal of the Road Association of Serbia “Via Vita”*, No. 1 (2012) 5-11.
9. **Kaisar E.**, Hess L., and Portal-Palomo A.B., “An Emergency Evacuation Planning Model for Vulnerable Population Utilizing Public Transportation Systems” *Journal of Public Transportation* Vol. 15, No. 2, (2012) 45-70.
10. Parr S., **Kaisar, E.**, and Stevanovic, A.Z. (2011). “Utility of Transit Signal Priority for No-Notice Urban Emergency Evacuation”, *Journal of Homeland Security*, Fall 2011.
11. Parr S., and **Kaisar E.**, “Critical Intersection Signal optimization During Urban Evacuation Utilizing Dynamic Programming”, *Journal of Transportation Safety and Security*, Feb 2011, pp.59-76.
12. Coolahan J., Kane, M., Morse K., **Kaisar E.**, Koomullil R., Shih A., and Walsh K., “Results of a Simulation of Response to a Bioterrorism Crisis”, *Management and Simulation Journal*, Vol. 5 Issue 1, May 2010, pp. 4-16.
13. **Kaisar E.**, and Austin M., “Synthesis and Validation of High-level Behavior Models for Narrow Waterway Management Systems” *Journal of Computing in Civil Engineering*, ASCE, September, 2007, pp. 373-378
14. **Kaisar E.**, Austin, M., and Papadimitriou S., “Formal Development and Evaluation of Narrow Passageway Systems Operations,” *European Transport/Transporti Europei*, Vol. 34, December 2006, pp. 88-104.
15. Bared J.G., Powell A., **Kaisar E.**, and Jagannathan R., “Crash Comparison of Single Point and Tight Diamond Interchanges” *ASCE Journal of Transportation Engineering*, Vol. 131, No. 5, 2006, pp. 379-381.

SELECTED JOURNAL PUBLICATIONS (PRIOR TO 2006)

1. **Kaisar E.**, Austin M., Lagakos V., Papadimitriou S., and Haghani A., “Hierarchical Object-Oriented Models for Management of Narrow Passageways” European Research Studies Journal, Volume VI, Issue (3-4), 2003, pp 95-108.
2. Bared J.G., Powell A., and **Kaisar E.**, “Traffic Planning Models for Single Point and Tight Diamond Interchanges” Transportation Research Record, TRR No. 1847, Journal of the Transportation Research Board, Washington, D.C., 2003.
3. Bared J.G., and **Kaisar E.**, “Does Your Interchange Design Have You Going Around in Circles?” Journal Public Roads, Vol. 66. No. 3, pp. 43-47 November/December 2002, Federal Highway Administration, Washington, D.C., 2002.
4. Bared J.G., and **Kaisar E.**, “Median U-turn Design as an Alternative Treatment for Left Turns at Signalized Intersections” ITE Journal, Institute of Transportation Engineering, Vol.72, pp.50-54, Feb 2002.
5. Bared J.G., and **Kaisar E.**, “Advantage of the Split Intersection,” Journal of Public Roads, Vol. 63. No. 6, pp38-44 May/June 2000, Federal Highway Administration, Washington, D.C., 2000.
6. Bared J.G., and **Kaisar E.**, “Benefits of Split Intersections,” Transportation Research Record, TRR No. 1737, Journal of the Transportation Research Board, Washington, D.C., 2000.
7. **Kaisar E.**, “Design and Layout of an Isolated Urban Intersection,” Technical Current Events, Transport-TEE-255, Athens, Greece, April 1994.

Theses Published

1. Kaisar E. (2005). A Stowage Planning Model for Multiport Container Transportation, Ph.D. Thesis.
2. Kaisar E. (2000). Development of a Methodology for Containership Stowage Planning, M.S. Thesis.
3. Kaisar E. (1994). Design and Layout of an isolated Urban Intersection, B.S. Thesis.

Books, Book Chapters/Book Articles

4. **Kaisar E.**, Parr S., and Scarlatos P., “An Urban Chemical Disaster Traffic Simulation Model: A Case Study for No-notice Emergency Evacuation Development”, In Latest Trends on Urban Planning and Transportation, Manoj Jha Editor, I SBN 978-960-474-204-2, July 2010, pp. 33-47.
5. Scarlatos P., **Kaisar E.**, and Teegavarapu R., “Modeling and Simulation of Catastrophic Events Affecting Critical Infrastructure Systems”, In Mathematical Methods and Applied Computing”, ISBN 978-960-474-124-3, 2009, pp. 324-346.

PROFESSIONAL PRESENTATIONS (SELECTED)

1. “Guidance for Implementing Transit Signal Priority” MD Sultan Ali, Luis Zerpa, and **Kaisar E.**, FSITE Summer Meeting 2017, Naples, FL June 2017.
2. “Freight Mobility Research Institute (FMRI)” **Kaisar E.**, Florida Chamber of Commerce, Trade and Logistics Meeting, Lakeland, FL, March 2017.
3. “Multimodal Intelligent Transportation Research Laboratory; Intermodal Transportation and Terminal Operations” **Kaisar E.**, presented to “Smart Transportation: A Look Back and Staying Ahead” 2016 District 10/FSITE Annual Meeting (**Invited Talk**), November, 2016.
4. “Port Resilience Assessment Tool” Dhanak m., and **Kaisar E.**, presented to Maritime Security Center Annual Meeting, Washington DC, November 2016.
5. “Evaluation of Emergency Evacuation Methodologies for an Urban Area by Using Advanced Microscopic Platform” Parr S., Machado A., and **Kaisar E.**, presented to “Smart Transportation: A Look Back and Staying Ahead” 2014 District 10/FSITE Annual Meeting, November, 2014.
6. “A Comparison of Non-traditional Intersection Designs Using Microscopic Platforms” Chery S., **Kaisar E.**, and Machado A., presented to “Smart Transportation: A Look Back and Staying Ahead” 2014 District 10/FSITE Annual Meeting, November, 2014.

7. "Investigation of the Impact of Junctions on the Frequency and Severity of Road Crashes" Kapetanakis K., and **Kaisar E.**, presented at March 2014, Miami Florida Technical Conference & Exhibit Institute of Transportation Engineers (ITE) (**Invited talk**).
8. "Berth Scheduling in Container Terminals: A Proactive Approach to Address Uncertainties in Arrival and Handling Times" Portal Palomo A.B., Ghenai C., **Kaisar E.**, and Golias M.M., presented April 2013, FAU Research Day 2013, Boca Raton, FL. (**awarded**)
9. "Modeling and Simulation on the Yard Trailers Deployment in a Maritime Container Terminal" Zhao Y., and **Kaisar E.**, presented at November 2011, Charlotte, North Carolina, INFORMS Annual Meeting.
10. "Optimization of Transit System Operations under Normal and Emergency Conditions" Psarros I., and **Kaisar E.**, presented at November 2011, Charlotte, North Carolina, INFORMS Annual Meeting.
11. "Optimizing Shuttle Service for Minimum Cost Operation-A Case Study in Florida Atlantic University" Portal Palomo A.B., and **Kaisar E.**, presented at November 2011, Charlotte, North Carolina, INFORMS Annual Meeting.
12. "Evacuation and Emergency Response Management" **Kaisar E.**, Presented at Florida International University, ITE FIU Student Chapter, April 2011.
13. "Utility of Transit Signal Priority for No-notice Urban Emergency Evacuation" Parr S., **Kaisar E.**, and Stevanovic A., presented to DHS Science Conference, April 2011, Washington DC.
14. "Preparedness and Catastrophic Events management: Florida Cases", **Kaisar E.**, Transportation Research Board Annual Meeting, Washington DC, January 2011.
15. "Catastrophic Event Planning and Response for Urban Areas Utilizing Dynamic Traffic Assignment and Departure Time", **Kaisar E.**, presented at October 2010, Austin, TX, INFORMS
16. "Traffic Planning Models for Unconventional Interchanges using Micro-simulation Platforms", Florida International University, ITE Student Chapter, Miami, FL, Fall 2009.
17. "Container Terminal Operation and Operations Research", **Kaisar E.**, Invited Distinguish Speaker, Piraeus, Greece, July 2009.
18. "The Future of Transportation: an Academic Perspective", **Kaisar E.**, Ministry of Transportation, Highway Division, Athens, Greece, July 2009.
19. "Emergency Evacuation Planning for Populations with Special Needs" Hess L., and **Kaisar E.**, Presented to CORS-INFORMS International, Toronto, Canada, June 2009.
20. "Deterministic Emergency Evacuation Modeling under a Terrorist Threat for Population with Special Needs" Hess L., and **Kaisar E.**, presented to 3rd Annual DHS University Network Summit, March 2009, Washington DC.
21. "Catastrophic Event Response and Planning for Baltimore MD.: Network Analysis and Case Study" Degnan W., Johnsen A., Simons L., Acopian G., **Kaisar E.**, and Sobhan K., presented to 3rd Annual DHS University Network Summit, March 2009, Washington DC.
22. "Evaluation of Emergency Evacuation Strategies for the Urban Chemical Disaster Federation" Parr S., Pentaras D., Ornitz S., Schokkin J.W., **Kaisar E.**, and Sobhan K., presented at March 2008, 2nd Annual DHS University Network Summit, Washington DC.
23. "Transportation Security and Methodologies to Improve Safety in the Intermodal Facilities", **Kaisar E.**, Transportation Research Board Annual Meeting, Washington DC, January 2008.
24. "Transportation Operation and Safety" **Kaisar E.**, Keynote Speaker, ITE Golden Chapter, Boca Raton, FL Spring 2008.
25. "A Data Envelopment Analysis Model to Asses the Efficiency of Intermodal Transportation Systems" Gundersen E., **Kaisar E.**, and S., Teegavarapu, presented at November 2007, Seattle, WA, INFORMS.
26. "Optimization Model for Use of Aircraft Deicing and Anti-icing Fluids" Ornitz S., **Kaisar E.**, and S., Teegavarapu, presented at July 2007, Puerto Rico INFORMS International.
27. "Design of an Urban Chemical Disaster Federation for Catastrophic Events Management" **Kaisar E.**, presented at July 2007, Puerto Rico INFORMS International
28. "The Transportation Role in Emergency Evacuation Management", **Kaisar E.**, Florida Department of Transportation, District 4, Research Meeting, Fort Lauderdale, FL, Spring 2007.
29. "The Role of Micro-simulation platforms and Optimization Techniques in Transportation Management", **Kaisar E.**, PACER workshop Day, Orlando, FL, October 2006.

30. “Developing Measures of Us Ports Productivity and Performance: Using DEA and FDH Approaches” **Kaisar E.**, and A., Haghani, presented at October 2006, Pittsburg, PA, INFORMS.
31. “A Decision Rules for Allocation of Dock Storage Space for Export Containers” **Kaisar E.**, and A. Haghani, presented at October 2004, Denver, CO, INFORMS.
32. “Synthesis and Validation of Models for Management of Narrow Passageways” **Kaisar E.**, and M. Austin presented at March 2004, College Park, Maryland Industry Research Day.
33. “A Heuristic Algorithm for Container Loading Problem” (**Invited**) **Kaisar E.**, and A. Haghani, presented at October 2003, Atlanta, GA INFORMS.
34. “Multi-Level Modeling for Management of Narrow Passageways” **Kaisar E.** and M. Austin presented at March 2003, College Park, Maryland Industry Research Day.

TECHNICAL REPORTS

1. Berry L., Rodrigues J., **Kaisar E.**, Bloetscher F., and Scarlatos P., “Development of a Methodology for the Assessment and Mitigation of Sea Level Rise Impacts on Florida’s Transportation Modes and Infrastructure, Synthesis of Studies”, FDOT, Summer 2011.
2. Scarlatos P., and **Kaisar E.**, “Preparedness and Catastrophic Events Management for the Washington D.C. Metropolitan Area”, FTA-FL-26-7102-2011, June 2011.
3. Scarlatos P., and **Kaisar E.**, “An Emergency Evacuation Planning Model for Special Needs Population Utilizing Public transit Systems”, FTA-FL-26-7102-01, June 2010.
4. Scarlatos P., and **Kaisar E.**, “WMATA Transit Security Project into a National Training Model Using 3-D Visualization and Demonstrate Value of Transferability of Professional Development to Similar Transit Terminals”, FTA-FL-26-7102-00, June 2009.
5. **Kaisar E.**, “Developing a Collaborative Profile of Intermodal Transportation Safety and Security through Federal and State Agency Impact Analysis. FTA-FL-26-7102-000, Summer 2008
6. **Kaisar E.**, “Modeling and Integration Framework”, PACER-2006-2008, Summer 2007.
7. **Kaisar E.**, and Austin M., "Synthesis and Validation of High-Level Behavior Models for Narrow Waterway Management Systems," ISR Technical Report 2005-109, Institute for Systems Research, University of Maryland, College Park, MD 20742, November 2005. 21 p.

SPONSORED RESEARCH

Funded Research. Total Career External Funding at FAU: \$13,638,886

Principal Investigator, “**Freight Mobility Research Institute (FMRI)**” A USDOT TIER 1 University Transportation Center sponsored by the U.S. Department of Transportation, period: 2016-2022, Amount: \$ 10,516,500.

Principal Investigator for the Research Project: “**Guidance for Identifying Corridor Conditions that Warrant Deploying Transit Signal Priority and Queue Jump**” sponsored by Florida Department of Transportation, period: 2016-2017, Amount: \$ 135,723.

Co-Principal Investigator for the Research Project (50%): “**A Smart Port Resiliency Assessment and Planning Tool**” sponsored by the Department of Homeland Security, period: 2014-2017, Amount: \$525,000.

Co-Principal Investigator for the Research Project (30%): “**Developing a Multi-Hazard Mitigation Plan for South East Florida (FAU Multi campuses)**” sponsored by Federal Emergency Management Agency (FEMA), period: 2010-2014, Amount: \$400,000.

Co-Principal Investigator for the Research Project (25%): “**Development of a Methodology for the Assessment and Mitigation of Sea Level Rise Impacts on Florida’s Transportation Models and Infrastructure**” sponsored by Florida Department of Transportation (FDOT), period: 2010-2011, Amount: \$149,071.

Co-Principal Investigator for the Research Project (50%): **“Expansion of WMATA Transit Security into a National Training Model Using 3-D Visualization, and Demonstrate the Value of Transferability of Professional Development to Similar Transit Terminals”** U.S. Department of Transportation-Federal Transit Administration (FTA), period: 2006-2010, \$591,446.

Principal Investigator for the Research Project: **“Preparedness and Catastrophic Event Management for the Washington, D.C. Metropolitan Area”** sponsored by the Center for Intermodal Transportation Safety and Security/Federal Transit Administration (FTA), period: 2010-2011, Amount: \$65,721.

Principal Investigator for the Research Project: **“Emergency Evacuation Planning Model for Special Need Population Utilizing Public Transit Systems”** sponsored by the Center for Intermodal Transportation Safety and Security/Federal Transit Administration (FTA), period: 2009-2010, Amount: 77,721.

Principal Investigator for the Research Project: **“Transportation Simulation Modeling for bio-terrorism Preparedness and Response”** sponsored by PACER/ Department of Homeland Security, period: 2008-2009, Amount: \$114,500.

Principal Investigator for the Research Project: **“Calamity Preparedness and Emergency Evacuation Plan Simulation for a Metropolitan Area”** sponsored by PACER/ Department of Homeland Security, period: 2009, Amount: \$17,030.

Principal Investigator for the Research Project: **“Transportation Modeling for the Urban Chemical Disaster Federation”** sponsored by PACER/ Department of Homeland Security, period: 2007-2008, Amount: \$114,500.

Principal Investigator for the Research Project: **“Traffic Simulation for Emergency Preparedness”** sponsored by PACER/ Department of Homeland Security, period: Summer 2008, Amount: \$9,000.

Principal Investigator for the Research Project: **“Developing a Collaborative Profile of Intermodal Transportation Safety and Security through Federal and State Agency Impact Analysis”** sponsored by the Center for Intermodal Transportation Safety and Security/Federal Transit Administration (FTA), period: 2008-2009, Amount: \$99,999.

Principal Investigator for the Research Project: **“Transportation Equity and Emergency Preparedness for Citizens with Special Needs: Model Calibration and Validation”** sponsored by the Center for Intermodal Transportation Safety and Security/Federal Transit Administration (FTA), period: 2008, Amount: \$25,150.

Principal Investigator for the Research Project: **“Calamity Preparedness using Transportation Simulation Modeling for the Urban Chemical Disaster Federation”** sponsored by PACER/ Department of Homeland Security, period: 2007-2008, Amount: \$24,060.

Principal Investigator for the Research Project: **“Traffic Simulation for Urban Chemical Disaster Simulation; II”** sponsored by PACER/ Department of Homeland Security, period: Summer 2007, Amount: \$4,500.

Principal Investigator for the Research Project: **“Traffic Simulation for Urban Chemical Disaster Simulation”** sponsored by PACER/ Department of Homeland Security, period: 2006-2007, Amount: \$48,070.

Principal Investigator for the Research Project: **“Traffic Impact Study of the Port of Miami’s Traffic Congestion Problem”** sponsored by the Center for Intermodal Transportation Safety and Security/Federal Transit Administration (FTA), period: 2008, Amount: \$25,000.

Co-Principal Investigator for the Research Project (50%): “**Transit Security Project into a National Training Model Using 3-D Visualization and Simulation**” U.S. Department of Transportation-Federal Transit Administration (FTA), period: 2004-2008, \$693,855.

Funded Research (Internal Projects)

Principal Investigator for the Research Project: “**Traffic Simulation Analysis of Florida Atlantic University**” sponsored by Florida Atlantic University (Traffic & Parking Division), period: 2015, Amount: \$14,958.

Principal Investigator for the Research Project: “**Pedestrian Safety and Traffic Calming**” sponsored by Florida Atlantic University (Traffic & Parking Division), period: 2014, Amount: \$14,287.

Principal Investigator for the Research Project: “**Campus Master Plan: Pedestrian Friendly**” sponsored by Florida Atlantic University (Traffic & Parking Division), period: 2013, Amount: \$12,958.

Principal Investigator for the Research Project: “**Parking Modeling and Survey**” sponsored by Florida Atlantic University (Traffic & Parking Division), period: 2012, Amount: \$11,998.

Principal Investigator for the Research Project: “**Transit Efficiency Study for FAU Boca Raton, Campus**” sponsored by Florida Atlantic University (Traffic & Parking Division), period: 2011, Amount: \$11,843.

Co-Principal Investigator for the Research Project (10%): “**Climate Change Initiative Research, Engineering and Regional Adaption to Sea Level Rise**” sponsored by Florida Atlantic University (FAU Research Priority Areas), period: 2010-2011, Amount: \$495,891.

Principal Investigator for the Research Project: “**Feasibility Study of Transit System at the FAU, Boca Raton Campus**” sponsored by Florida Atlantic University (Traffic & Parking Division), period: 2010, Amount: \$5,500.

Principal Investigator for the Research Project: “**Traffic Study and Satellite Parking Project**” sponsored by Florida Atlantic University (Traffic & Parking Division), period: 2009, Amount: \$2,500.

Research Activities at Florida Atlantic University

Main researcher in the technical team including researchers from North Carolina Department of Transportation, and Federal University of Minas Gerais, Brazil in the research project for “Park and Ride Best Practices”, period: 2014-2015.

Main researcher in the technical team including engineers from New Hampshire Department of Transportation, Minnesota Department of Transportation, consulting agencies, Federal Highway Administration and National Technical University of Athens, in the research projects for “Operational and Safety Evaluation of Roundabouts”, period: 2012-2016.

Main researcher in the technical team of researchers including, Maritime Administration MARAD and University of Piraeus in the Research Project “Shortsea Shipping Modeling and Performance Studies”, period: 2010-2011.

Main researcher in the Research Project “Algorithms for the Port Scheduling and Container Handling System”, period: 2009-2010.

Main researcher in the technical team including, University of Missouri, Columbia, University of Minnesota, University of Cyprus, and Federal Highway Administration, for Geometric Design research studies: Unconventional

Intersections Design; Transportation Operation and Safety, Diverging Diamond Interchange and Partial Cloverleaf, etc., period: 2007-2017.

Participation in the technical team including, Florida Atlantic Universities Researchers, Palm Beach County, Traffic Division of City of Boca Raton and Florida Department of Transportation in the research project: “Testing Accuracy and Reliability of MAC Readers to Measure Arterial Travel Times”, period: 2009-2011.

Participation in the technical team including, Florida Atlantic Universities Researchers, Palm Beach County, Traffic Division of City of Boca Raton and Florida Department of Transportation in the research project: “Field Evaluation Studies of Signal Timings Developed by Signal Optimization Tool”, period: 2009-2010.

Main researcher in the Research Project “Transportation Distribution Network and Traffic Impact Studies”, period: 2008-2010.

Main researcher in the Research Project “Optimizing the use of Aircraft De-icing Anti-icing Fluids under Operational and Environmental Constraints”, period: 2008-2010.

Participation in the technical team including Florida Atlantic University Researchers, Traffic Division of the City of Boca Raton and TranSystems in the Research Project “Review and Evaluation of the Partial Cloverleaf Design”, period: 2007.

Participation in the technical team including Florida Atlantic University Researchers, University of Central Florida, Port of Jacksonville and Florida Department of Transportation in the Research Project “Port of Jacksonville (JAXPORT) Project”, period: 2006-2008.

SELECTED PUBLICATIONS

Refereed Conference Publications (2006 – Present: During FAU Tenure)

1. **Kaisar E.**, and Al-Gandour M., “Evaluation of Operational Traffic Performance for reduced Conflict on Unconventional Intersections” conference proceedings at the 5th IRF Middle East Regional Congress & Exhibition, Dubai, UAE, Oct, 29-31, 2017.
2. E. Bou-Harb **Kaisar E.**, and Austin M., “On the Inference and Characterization of Novel Empirical Attack Models Targeting Container Terminals” conference proceedings at the 5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems, Naples, Italy June 26-28 2017.
3. MD Sultan A., **Kaisar E.**, and M. Hadi “Guidance for Identifying Corridor Conditions that Warrant Deploying Transit Signal Priority and Queue Jump” conference proceedings at the 5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems, Naples, Italy June 26-28 2017
4. **Kaisar E.**, and Al-Ghandour M., “Comparative Analysis of Diverging Diamond Interchange and Partial Cloverleaf Interchange Using Micro-Simulation Modeling” conference proceedings at the 5th Urban Street Symposium, Raleigh, North Carolina, May 21-24 2017.
5. **Kaisar E.**, Al-Ghandour M., and Averkiou P., “The Impact of Junctions on the Frequency and Severity of Road Crashes in Florida” conference proceedings at the 5th Urban Street Symposium, Raleigh, North Carolina, May 21-24 2017.
6. **Kaisar E.**, and Al-Ghandour M., “Traffic Impact Assessment of Partial Cloverleaf Using Microscopic Traffic Simulation” conference proceedings at the 96th Transportation Research Board Annual Meeting, Washington DC, January 2017.
7. Zhao Y., and **Kaisar E.**, “Modeling and Simulation on the Yard Trailers Deployment in the Maritime Container Terminal”, submitted to 14th World Conference of Transportation Research, Shanghai, China, July 2016.

8. Al-Ghandour M., **Kaisar E.**, and Machado A., “A Framework for Planning Park-and-Ride Facility Process: Identify the Optimal Number of Parking Spaces”, submitted to 14th World Conference of Transportation Research, Shanghai, China, July 2016.
9. **Kaisar E.I.**, and Parr S., “Emergency Evacuation Management Utilizing Public Transit Systems Using Micro-simulation”, Submitted to International Symposium of Enhancing Highway Performance (ISEHP 2016), Berlin, June 2016.
10. **Kaisar E.I.**, and Antoniou K., Parr S., “Evaluation of Mini-roundabouts Performance Using a Microsimulation Platform”, Submitted to International Symposium of Enhancing Highway Performance (ISEHP 2016), Berlin, June 2016.
11. Dimitriou L., **Kaisar E.**, and Hourdos J., “Evaluation of Operational Traffic Performance for Reduced Conflict Intersections”, submitted to 2nd Annual International Conference on Transportation, June 2016, Athens, Greece.
12. **Kaisar E.I.**, and Al-Ghandour M., “An Overview Framework for Planning Park-and-Ride Facilities Process: Number of Parking Spaces”, accepted to ASCE International Conference on Transportation and Development (ICTD 2016). June 2016, Houston Texas.
13. **Kaisar E.I.**, and Al-Ghandour M., “Determine Optimal Lots for Developing Planning Park –and-Ride Facilities Process: Case Study Palm beach County, FL”, An Overview Framework for Planning Park-and-Ride Facilities Process: Number of Parking Spaces”, accepted to ASCE International Conference on Transportation and Development (ICTD 2016). June 2016, Houston Texas
14. **Kaisar E.**, “An Emergency Evacuation Planning Model for Special Needs Population Utilizing Public Transit Systems, National Evacuation Conference, March 2016.
15. **Kaisar E.I.**, Kapetanakis K., and Averkiou P., “Analysis of the Impact of junctions with Frequent Road crashes in Urban Areas”, conference proceedings at 2015 Road Safety & Simulation International Conference, October 6-8, 2015, Orlando Florida.
16. **Kaisar E.I.**, Phillips D., Antoniou C., Laffitte G., Harvey C., “Simulation Based Evaluation for Operation and Safety of Mini-roundabouts with Low-Volume Un-signalized and Signalized Intersections”, conference proceedings at 2015 Road Safety & Simulation International Conference, October 6-8, 2015, Orlando Florida.
17. **Kaisar E.I.**, and Olarte C., “Operational and Environmental Comparison between Left-turn Bypass, Diverging Flow and Displacement Left Turn Intersection Designs” Submitted to 5th International Symposium on Highway Geometric Design, Vancouver, Canada, June 2015
18. **Kaisar E.**, and Nieland R., “Traffic Impact Assessment of Partial Cloverleaf Interchange” Submitted to 5th International Symposium on Highway Geometric Design, Vancouver, Canada, June 2015.
19. **Kaisar E.**, and Linear Programming Mosel for Short Sea Shipping in the United States”, conference proceedings at the 95th Transportation Research Board Annual Meeting, Washington DC, January 2015.
20. **Kaisar E.**, Gundersen E., and Teegavarapu R., “Implementing and Interpreting a Data Envelopment Analysis Model to Assess Safety and Security of Intermodal Facilities” conference proceedings at the 14th COTA International Conference of Transportation Professionals, Changsha, China July 2014.
21. **Kaisar E.**, Degan W., Coolahan J., and Koomullil R., “ A Hybrid Meso-Microscopi Model for Catastrophic Event Management” conference proceedings at the 14th COTA International Conference of Transportation Professionals, Changsha, China July 2014.
22. Portal M.I., **Kaisar E.**, Golias M., and Ivey S., “Scheduling Container Vessels Under Handling and Arrival Time Uncertainty” conference proceedings at the 92th Transportation Research Board Annual Meeting, Washington DC, January 2013.
23. Parr S., **Kaisar E.**, and Sisiopiku V., “Traffic Micro-Simulation Modeling for an Urban Chemical Disaster”, conference proceedings at the AlaSim International 2012, Huntsville, Alabama, May 2012.
24. Johnsen S., and **Kaisar E.**, “Using Arterial Streets to Mitigate Highway Congestion during regional Evacuations within a Grid System”, conference proceedings at the 2012 National Evacuation Conference, Feb. 2012, New Orleans, Louisiana.
25. **Kaisar E.**, and Hess L., “An Emergency Evacuation Planning Model for Special Need Populations Utilizing Public Transit Systems”, conference proceedings at the 91th Transportation Research Board Annual Meeting, Washington DC, January 2012

26. Stevanovic A.Z., Olarte C.L., Gallettebeitia, A., Gallettebeitia, B., and **Kaisar, E.** “Testing Accuracy and Reliability of MAC Readers to Measure Arterial Travel Times.” conference proceedings at 18th World Congress on Intelligent Transportation Systems, October 16-20, 2011, Orlando, FL.
27. Stevanovic A.Z., Kergaye C., and **Kaisar E.**, “Field Evaluation of Signal Timings Developed by a Stochastic Signal Optimization Tool”, conference proceedings at 18th World Congress on Intelligent Transportation Systems, October 16-20, 2011, Orlando, FL.
28. Portal Palomo A.B., **Kaisar E.**, and Scarlatos P., “Shuttle Efficiency Study: The “Owl Express” Conference proceedings at the 9th Latin American and Caribbean Consortium of Engineering Institutions, August 2011, Medellin, Colombia.
29. Olarte C., and **Kaisar E.**, “Operational Performance Comparison between Three Unconventional Intersections Designs”, Conference proceedings at the 9th Latin American and Caribbean Consortium of Engineering Institutions, August 2011, Medellin, Colombia.
30. Portal Palomo I., **Kaisar E.**, “Ports as a Growing Factor in the Supply Chain”, Conference proceedings at the 9th Latin American and Caribbean Consortium of Engineering Institutions, August 3-5, Medellin, Colombia.
31. Parr S.A., **Kaisar E.**, and Stevanovic, A. “Examining the Level of Service Consequence of Transit Signal Priority during Urban Evacuation.” Presented at 6th International Symposium on Highway Capacity and Quality of Service, June 28th - July 1st, 2011, Stockholm, Sweden.
32. Olarte C., **Kaisar E.**, Portal Palomo A.B., Edara P., and Bared J., “Operational, Environmental and Safety Comparisons between Left-turn Bypass, Diverging Flow and Displacement Left Turn Intersections”, conference proceedings 1st International Conference on Access management, Athens Greece, June 14-17, 2011.
33. **Kaisar E.**, Edara P., Rodriguez-Seda J., and Cherry S., ”Comparison on Nontraditional Intersectional Designs Using Microscopic Simulation”, conference proceedings at the 90th Transportation Research Board Annual Meeting, Washington Dc, January 2011.
34. **Kaisar E.**, Parr S., and Scarlatos P., “Traffic Simulation Modeling for an Urban Chemical Disaster: Emergency Evacuation Development and Case Study”, Conference proceedings at the 8th Latin American and Caribbean Consortium of Engineering Institutions June 1-5 2010 Arequipa, Peru.
35. Degan B., and **Kaisar E.**, “Multi-layered Simulation Regarding Catastrophic Event Planning and Response Using Dynamic Traffic Assignment”, conference proceedings at the National Evacuation Conference, Feb. 2010, New Orleans.
36. Hess L., **Kaisar E.**, and Scarlatos P., “Emergency Evacuation Planning for Special Need Populations in a No-warning Evacuation Utilizing Public Transit Systems”, conference proceedings at the National Evacuation Conference, Feb. 2010, New Orleans.
37. Parr S., and **Kaisar E.**, “Transit Priority Signal Optimization During Urban Evacuation Utilizing Dynamic Programming Under Casualty Constraints”, conference proceedings at the National Evacuation Conference, Feb. 2010, New Orleans.
38. Ornitz S., **Kaisar E.**, and Teegavarapu R., “Mixed Integer Nonlinear Programming Model to Optimize the Use of Aircraft Deicing and anti-icing Fluids”, conference proceedings at the 90th Transportation Research Board Annual Meeting, Washington DC, January 2010.
39. Coolahan J., Morse K., **Kaisar, E.**, Koomullil R., Shih A., and Walsh K., “Results of a Simulation of response to a Bioterrorism Crisis”, conference proceedings at the Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC) , Orlando, USA 2009.
40. Scarlatos P., **Kaisar E.**, and Teegavarapu R., “Modeling and Simulation of Catastrophic Events Affecting Critical Infrastructure Systems”, conference proceedings at the WSEAS-Applied Computing Conference (ACC'09), Athens, Greece Sep. 2009.
41. Gundersen E., **Kaisar E.**, and Scarlatos P., “Assessing Container Terminal Safety and Security Using Data Envelopment Analysis”, conference proceedings at the Urban Planning and Transportation Conference, Rhodes, Greece, July 2009.
42. **Kaisar E.**, and Scarlatos P., “Simulation and Visualization Applications for Security Analysis of Infrastructure Facilities”, conference proceedings at the 2009 International Simulation Multi-conference, Istanbul Turkey, July 2009.

43. Coolahan J., **Kaisar E.**, and Morse K., “Modeling the Relationships between Hospital Surge Capacity and Dynamic Traffic Conditions” accepted for presentation and publication 2009 International Simulation Multi-conference, Istanbul Turkey, July 2009.
44. **Kaisar E.**, Degnan, W., and Schokkin J.W. “ A Simulation Model for Bioterrorism Preparedness in Urban Area,” accepted for presentation and publication at the Third International Conference on Safety and Security Engineering, Rome Italy, July 2009.
45. Schokkin J.W. and **Kaisar E.**, “Evaluation of Emergency Evacuation Strategies in Case of Chemical Disaster for an Urban Area Using a Microscopic Traffic Simulator,” conference proceedings at the Urban Transport 2009. Bologna, Italy, June 2009.
46. Johnsen A., Gundersen E., **Kaisar E.**, and Scarlatos, P., “Emergency Evacuation Methodologies Utilizing Public Transit with Meso-simulation,” conference proceedings at the Spring Simulation Interoperability Workshop, San Diego, CA, March, 2009
47. Coolahan J., Kane M., Morse, K., Koomullil R., **Kaisar E.**, and Walsh K., “Design of a Bioterrorism Crisis Management Simulation for Preparedness and Response,” conference proceedings at the Spring Simulation Interoperability Workshop, San Diego, CA, March, 2009.
48. Parr S., Pentaras D., and **Kaisar E.**, “Evaluation of Emergency Evacuation Methodologies for an Urban Area by using Advanced Microscopic Simulator,” conference proceedings at the 14th ISSAT International Conference on Reliability and Quality in Design, Orlando, FL August, 2008.
49. Coolahan J., Koomullil R., **Kaisar E.**, and Walsh K., “Results of a Federation Simulation of Urban Chemical Disaster Response,” conference proceedings at the Interservice/Industry Training, Simulation, and Education Conference (IITSEC) , Orlando, USA 2008.
50. Gundersen E., **Kaisar E.**, and Teegavarapu R., “ Developing a Collaboration Model for Enhancing Security and Safety in Intermodal Transportation Planning,” conference proceedings at the 10th International Conference on Application Advanced Technologies in Transportation-AATT 2008, Athens, Greece, May, 2008.
51. Ornitz S., **Kaisar E.**, and Teegavarapu R., “ Optimizing the Use of Aircraft Deicing and Anti-icing Fluids under Budgetary, Infrastructure and Environmental Compliance Constraints,” conference proceedings at the 10th International Conference on Application Advanced Technologies in Transportation-AATT 2008, Athens, Greece, May, 2008.
52. Coolahan J., Koomullil R., **Kaisar E.**, and Walsh, K., “Design of an Urban Chemical Disaster Simulation for Preparedness and Response,” conference proceedings at the 2007 Fall Simulation Interoperability Workshop (SIW), Orlando, FL, September, 2007.
53. **Kaisar E.**, Austin M., and Papadimitriou S., “A Formal Evaluation of Narrow Passageway Systems Development, ” conference proceedings at the 2nd International Conference on Transportation and Logistics, July 2007, China
54. **Kaisar E.**, “A Model for Heavy Truck Freight Movement at the Intermodal Facilities in the Port of Baltimore” conference proceedings at the 7th Conference on Access Management, August 13-16, 2006, Park City, Utah.
55. **Kaisar E.**, Pathomsiri S., Haghani A., and Kourkounaki P., “Developing Measures of US Ports productivity and Performance: Using Data Envelopment Analysis and Free Disposal Hull Approaches” conference proceedings at the 47th Transportation Research Forum, March 23-25, 2006, New York.

SELECTED PUBLICATIONS

Refereed Conference Publications (Prior to 2006)

1. **Kaisar E.**, Pathomsiri S., and Haghani A., “Efficiency Measurements of US Ports Using Data Envelopment Analysis” National Urban Freight Conference, February 1-3, 2006 Long Beach, California.
2. **Kaisar E.**, and Haghani A. “Simulation of Traffic Conflicts at Signalized Intersections Using TSIS” International Workshop on Harbour, Maritime & Multimodal Logistics Modelling and Simulation, October 20-22 2005, Marseille, France.
3. **Kaisar E.**, Bared J.G., and Haghani A. “Single Point Urban Interchange: Could be a Winner in Fast-growing Cities” Conference Proceedings of the 20th Annual Transport Chicago Conference, June 3, 2005, Chicago.

4. **Kaisar E.**, Haghani A., and Panchangam K., “A Simulation Model for Determining the Length of Two-Lane Urban Work Zones” Conference Proceedings of the 2nd National Access Management Conference, Athens, Greece, May 2005.
5. **Kaisar E.**, and Haghani A. “Development of a Methodology for Containership Stowage Planning” Conference Proceedings of the 1st International Conference on Transportation Logistics, July 2005, Singapore.
6. **Kaisar E.**, and Haghani A. “Modelling Intermodal Freight Movements Using Offset T-Intersection” Proceedings of the Metropolitan Conference on Public Transportation Research, 19th Annual Transportation Chicago Conference, June 4, 2004, Chicago.
7. **Kaisar E.**, Austin M., and Haghani A. “An Object-Oriented Approach for the Architecture Design of the Management of narrow Passageways” Conference Proceedings of the International Workshop on Harbour, Maritime & Multimodal Logistics Modelling and Simulation, September 16-18 2004, Rio de Janeiro, Brazil.
8. **Kaisar E.**, Haghani A., and Panchangam K., “A Simulation Model for A Two-Lane Urban Work Zone” Conference Proceedings of the 6th world Multiconference on Systemics, Cybernetics and Informatics, July 14-18, 2002, Orlando, Florida.
9. Austin M., and **Kaisar E.**, “Multi-Level Analysis of Congested Transportation Systems” Conference Proceedings of the 6th world Multiconference on Systemics, Cybernetics and Informatics, July 14-18, 2002, Orlando, Florida).
10. Lagakos, V., **Kaisar E.**, and Austin M., “Object Modelling for the Management of Narrow Passageways in Transportation Systems,” Conference Proceedings of the International Council of System Engineering Conference, Melbourne, Australia, July 2001.
11. **Kaisar E.**, and Bared J.G., “Median U-turn Treatment as an Alternative to Direct Left Turns At Signalized Intersections Conference Proceedings of Abutting Land Uses and Access Management Conference, Athens, Greece, April 2001.
12. Haghani A., and **Kaisar E.**, “A Model for Designing Container Loading Plans for Containerships,” Conference Proceedings of the 80th meeting of the Transportation Research Board, Washington D.C., January 2001.
13. Bared J.G., and **Kaisar E.**, “Comparison of Diamond Interchanges with Roundabout Interchanges,” Conference Proceedings 2nd International Symposium on Highway Geometric Design,, Transportation Research Board, German Road and Transportation Research Association, Mainz Germany, 2000.
14. Bared J.G., and **Kaisar E.**, “The Split Intersection: A solution for a Congested Intersection,” Conference Proceedings of Urban Street Symposium, Transportation Research Circular, E-C019, December 2000, Dallas Texas, 1999.

SELECTED PUBLICATIONS

Conference Publications (Non-Referred Work)

1. Bared J.G., Powell A., and **Kaisar E.**, “A Simulation Model for Operational and Safety Comparison at Single Point and Tight Diamond Interchanges,” 5th National Conference on Access Management Conference, sponsored by Transportation Research Board, Federal highway Administration and Texas Department of Transportation, Austin, Texas, June 2002.
2. Bared J.G., and **Kaisar E.**, “Advantages of offset T-Intersections With Guidelines,” Conference Proceedings of the 3rd International Conference of Traffic Safety on Three Continents, Transportation Research Board, Swedish National Road and Transport, Forum of European Road Safety Research Institute, and Ministry of transport of the Russian Federation, Moscow, Russia, September 2001.
3. Bared J.G., and **Kaisar E.**, “Safety and Traffic Operational Benefit of Offset T-Intersection,” Proceedings of the 14th International Road Federation Road Work Congress Conference, International Road federation, Paris, France, June 2001.

STUDENT SUPERVISION

***No Ph.D. Program in Civil, Environmental and Geomatics Engineering at Florida Atlantic University**

Candidate nominated for Excellence in Graduate Mentoring Award on Spring 2009 and 2011.

Advisor and Committee Chair:

Student Name		Thesis/Dissertation Title	Degree	Role	Graduation
1)*	Elisabeth Gundersen	Data Envelopment Analysis and Assessment of Safety and Security of Intermodal Transportation Facilities	MSCE	Chair	Spring 2008
2)*	Mohammad Arman	A Mathematical Model for an Empty Container Distribution	MSCE	Chair	Pursue his Ph.D Purdue University
3)*	Scott Ornitz	Optimizing the Use of Aircraft and Anti-icing Fluids Under Budgetary and Environmental Compliance Constraints	MSCE	Chair	Spring 2009
4)	Kenzot Jasmin	Valuation of Damage Potential for Pavements Due to Overweight Truck Traffic (Master Project)	MSCE	Chair	Spring 2009
5)*	Linda Hess	Emergency Evacuation Modeling for People With Special Needs	MSCE	Chair	Fall 2009
6)*	William Degnan	Transportation Simulation Modeling for Bio-terrorism Preparedness and Response	MSCE	Chair	Spring 2010
7)*	Steve Cherry	A Comparison of Non-traditional Designs Using Microscopic Simulation	MSCE	Chair	Spring 2010
8)*	Scott Parr	Transit Signal Priority for Emergency Evacuation: Mitigating Disaster	MSCE	Chair	Spring 2010
9)*	Claudia Olarte	Operational Environmental and Safety Comparisons between Left-turn Bypass, Diverging Flow and Displacement Left-turn Intersections	MSCE	Chair	Spring 2011
10)*	Yueqiong Zhao	Algorithm of the Integrated Scheduling Problem for Container Handling System in a Container Terminal	MSCE	Chair	Spring 2011
11)	Constantin Bortes	Implementation of Single Point Urban Interchange in a Highway System (Master Project)	MSCE	Chair	Spring 2011

12)*	Alvaro Gallettebeitia	Shortsea Shipping Cost Benefit Analysis Using Mathematical Modeling	MSCE	Chair	Fall 2011
13)*	Borja Gallettebeitia	Comparative Analysis between the Diverging Diamond Interchange and Partial Cloverleaf Interchange Using Micro-simulation Modeling	MSCE	Chair	Fall 2011
14)*	Ioannis Psarros	Optimization of Bus Operations Under Normal and Emergency Conditions	MSCE	Chair	Spring 2012
15)*	Alicia Benazir Portal Palomo	An Optimization Framework of Transit Infrastructure Systems with Independent Facilities	MSCE	Chair	Spring 2012
16)*	Maria Isabel Portal Palomo	Berth Scheduling in Container Terminals: A Proactive Approach to Address Uncertainties in Arrival and Handling Times.	MSCE	Chair	Spring 2013
17)*	Abdul A. Mateen	Undecided	Ph.D	Co- Chair	TBA
18)	Brandon Fleming	Transportation Operations and Safety Comparison between Unsignalized and Signalized offset T-Intersections, Two Lane Roundabout and Modified Roundabout	MSCE	Chair	Spring 2014
19)*	Kostas Kapetanakis	Investigation of the Impact of Junctions on the Frequency of Road Crashes in Urban Areas	MSCE	Chair	Spring 2014
20)	Antoine Elasmr	An Overview Framework For Designing Number of Parking Space son Park-and Ride Facilities (Master Project)	MSCE	Chair	Fall 2014
21)*	Marcello Ferri	Investigating the Impact of Recurrent and Non-recurrent Congestion on Highway Operations	MSCE	Chair	Fall 2014

22)*	Arthur Dylan O`Berry	Transportation Engineering Assimilated Livability Planning Using Micro-Simulation Models for Southeast Florida	MSCE	Chair	Spring 2015
23)	Keyla Lopez	Promoting Pedestrian Safety and Traffic Calming on Oakland Park Blvd.	MSCE	Chair	Fall 2015
24)	Hasnain Ali Syed	Operational Comparison Between Mini roundabouts with or without Right Turn Slip Lane	MSCE	Chair	Spring 2017
25)*	Md Sultan Ali	Guidance for Identifying Corridor Conditions that Warrant Deploying Transit Signal Priority and Queue Jump	MSCE	Chair	Summer 2017
26)*	Charles Newberry Jr	High Crash Volume Benefit to Cost ratio Analysis for Interstate 95 Using the FHWA Safety manual Predictive Method	MSCE	Chair	Summer 2017
27)*	Luis Armando Zerpa Alvarez	Transit Signal Priority Implementation Guidance	MSCE	Chair	Summer 2017
28)	Dianne Phillips	Design, Simulation, and Evaluation of Automated Container Terminals	MSCE	Chair	Exp. Spring 2018
29)	Anusha Chowdhury	Operational Environmental and Safety Comparisons between Different Types of Mini Roundabouts	MSCE	Chair	Exp. Spring 2018
30)*	Alexandra Johnsen	Using Arterial Network Design to Mitigate Highway Congestion during Regional Evacuation within a Grid System	MSCE	Chair	Exp. Spring 2018
31)*	Olga Smith	Port Preparedness and Economic Resilience	MSCE	Chair	Exp. Spring 2018
32)*	Mary Anyse	Stowage Planning for Air Cargo	MSCE	Chair	Exp. Spring 2018

***Funded by E. Kaisar's Research Projects**

Committee Member:

Student Name		Thesis/Dissertation Title	Degree	Role	Graduation
1)	Delroy Peters	Characterizing Rain Gage-Radar (NEXRAD) Relationships using Inductive Model (Master Project	MSCE	Committee Member	Fall 2008
2)	Andre R. Ferreira	Optimal Operation of Hydro Power Systems under a Fuzzy Multi-objective Decision Making Environment	MSCE	Committee Member	Fall 2009
3)	Mario Mayes Fernandez	Evaluation of Poer Function of Nexpad and Rain Based Precipitation Estimates Optimal Operation of Hydro Power under a Fuzzy Multi-objeective	MSCE	Committee Member	Fall 2009
4)	Nicola Mitrovic	Minimize Person Delay at Railroad Crossing through Search Based Optimization Tool	MSCE	Committee Member	Spring 2011
5)	Dusan Jolovic	Evaluation of HOV/HOT Lane Impacts on Weaving Section Operations	MSCE	Committee Member	Spring 2012
6)	R.M Zahim Reza	Effects of Queue jumpers and Transit Signal Priority on Bus Rapid Transit	MSCE	Committee Member	Summer 2012
6)	Kevin Matthews	Assessment of Climate Change Impacts on Stream Flow Trends using a Water Balance Model	MSCE	Committee Member	Fall 2012
8)	Matt Kosar	Bridge Loading Rate Analysis and Review Program (Master Project)	MSCE	Committee Member	Spring 2013
9)	Chia-Hung Lin	Joint Probability Analysis of Precipitation and StemFlow Extremes	MSCE	Committee Member	Spring 2013

10)	Aneesh Goly	Climate Change and Extreme Precipitation Influence of Tele-connections	Ph.D.	Committee Member	Spring 2013
11)	Jenna Bobsein	Streamflow Extremes and Climate Variability in Southeastern United States	MSCE	Committee Member	Spring 2015
12)	Marija Ostojic	Assesment of Optimality of Arterial Signal Timing Plans Under Diurnal and Day-to-Day Variations in Traffic Demand	MSCE	Committee Member	Summer 2015
13)	Andrea Carpenter	Developing Fecal TMDLs using Fuzzy-based Approach	MSCE	Committee Member	Spring 2016
14)	Nivedita Sairam	Development of Mobile Mapping System For Road Corridor Mapping	MSCE	Committee Member	Spring 2016
15)	Ivica Klanac	Configuration and Assessment of Hardware in the Loop Simulation With High Resolution Data to Coordinate Traffic Signals	MSCE	Committee Member	Summer 2016
16)	Michael Burton Wood Jr	Using a Groundwater Influenced Sea level Rise Model to Asscess the Costs Due Sea Level Rise on a Coastal Community's Stormwater Infrastructure Using Limited Groundwater Data	MSCE	Committee Member	Fall 2016
17)	Mohammad Hachmi	Assessment of Changes in Precipitation Data Characteristics due to Infilling by Spatially Interpolated Estimates	MSCE	Committee Member	Fall 2016
18)	Wilord Metellus	Influences of Climate Variability of Rainfall Extremes of Different Durations	MSCE	Committee Member	Fall 2016

EDUCATION ACTIVITIES

Associate Professor, Florida Atlantic University, Boca Raton, FL
Assistant Professor, Florida Atlantic University, Boca Raton, FL

2012 – to Present
2006 - to June 2012

Course Developer and Instructor for Undergraduate and Graduate Courses in Transportation Engineering, Logistics and Supply Chain Management:

TTE 4005 Transportation Planning & Logistics (core course): STEM Academic Service-Learning (A S-L) course 2011 to present

Educational Activities at Florida Atlantic University

SLS 1503: Learning Strategy and Human Dev.	Fall 2016
SLS 1503: Learning Strategy and Human Dev.	Fall 2015
SLS 1503: Learning Strategy for Engineers	Fall 2014

SLS 1503 is designed to assist students in making the transition into higher education. Topics include time management, test taking skills, learning strategies and styles, diversity, short- and long-term planning, developing analytical and critical thinking skills, relationships, and campus resources.

Faculty Learning Communities Professional Development

- [1] Participant: “Developing Dual-numbered Upper Division Undergraduate/Lower Division Graduate Courses,” Center for Teaching and Learning, Florida Atlantic University, (Fall 2013-Spring 2014).
- [2] Participant: “Assessment Technologies,” Center for Teaching and Learning, Florida Atlantic University, (Fall 2013-Spring 2014).
- [3] Participant: “Assessment Technologies and Strategies,” Center for Teaching and Learning, Florida Atlantic University, (Fall 2012-Spring 2013).
- [4] Participant: “Distinction through Discovery QEP: (Re) Visioning Undergraduate Curricula to Promote Scholarly Inquiry and Research,” Center for Teaching and Learning, Florida Atlantic University, (Fall 2012-Spring 2013).
- [5] Participant: “Teaching Online Courses for Creativity and Critical Thinking,” Center for Teaching and Learning, Florida Atlantic University, (Fall 2012-Spring 2013).
- [6] Participant: “Critical Thinking,” Center for Teaching and Learning, Florida Atlantic University, (Fall 2009-Spring 2010).

eLearning Professional Development Training

- [1] Sloan-C Online Education retention Strategies Teaching (Fall 2012)
- [2] CEL 1001 eLearning Designer/Facilitator Certification Course (Fall 2011).

Instructional/Pedagogical Training

- [1] Writing Across the Curriculum Certification Training (Spring 2015)
- [2] Writing Across the Curriculum Certification Training (Spring 2014)
- [3] Continuing Education Forum: Minorities in Transportation (Spring 2012)
- [4] STEM Academic Service-Learning (A S-L) (Spring 2011)

Facilitator for:

- Transportation Engineering Seminar, Graduate.
Current issues and research developments in a Transportation Arena
- Institute of Transportation Engineer, Student Chapter Distinguish Lecture Series.
- American Society of Civil Engineers: Traffic Engineering Completion
- Distance Learning Courses in Transportation

Instructor, University of Maryland, College Park; **2004**
Department of Civil and Environmental Engineering
University of Maryland, ENCE 370 Introduction to Transportation Engineering and Planning

Teaching Assistant, University of Maryland, College Park; **2004**
Institute of Systems Research (ISR)
University of Maryland, ENSE 622 System Modeling and Analysis

Teaching Assistant, University of Maryland, College Park; **2001 - 2003**
Department of Civil and Environmental Engineering
University of Maryland, ENCE 370 Fundamentals of Transportation Engineering

HONORS

- Florida Atlantic University, Researcher of the Year Award, 2017
- Florida Atlantic University, Researcher of the Year Award Nominee, 2009.
- Featured in the Who's Who in Science and Engineering 2011-2012 (11th Edition).
- Best paper award at the Spring Simulation Interoperability Workshop, San Diego, CA, March, 2009.
- Florida Atlantic University, Advisor Mentoring Award Nominee, 2009.
- Outstanding Graduate Student Instructor, 2004.
- Best paper award at the 6th world Multiconference on Systemics, Cybernetics and Informatics, July 14-18, 2002, Orlando, Florida.
- Nominated twice for a paper award at the Transportation Research Board Annual meetings.
- First place at the poster competition in the TRB annual meeting, 2003.
- Third place at the poster competition in the TRB annual meeting, 2001.
- Graduate Research Scholarship, University of Maryland, 1998-2005.
- Graduate Research Travel Fund, Engineering Program, University of Maryland, 1999, 2001.
- NTIA, Greece Outstanding Academic Achievement, 1990, 1991, 1992, and 1993.

OTHER SCHOLARLY ACTIVITY:

Participation at Professional Meetings, Department Representative and Presenter (last 5 Years)

1. Council of University Transportation Centers, Summer Meeting, Buffalo, New York, June 2017.
2. FSITE Summer Meeting, Naples, FL, June 2017.
3. Transportation Research Board Freight Committees Meeting (AT050) Summer Meeting, Irvine, CA, Spring 2017
4. TRB, innovations in Freight Data Workshop, Irvine CA, May 2017.
5. Palm Beach North Chamber; Logistics Workforce Initiative, Spring 2017
6. Florida Chamber of Commerce; Trade and Logistics Institute meeting, Spring 2017
7. Palm Beach North Chamber; Riviera Business Council, Fall 2016
8. 15th International; Conference on Managed Lanes, Evolution of Managed Lanes: What's Next and How do we Get There? Miami, May 2016
9. Miami-Dade MPO Governing Board Meeting: Automated Vehicle Technology, Miami, March 2016
10. Florida Minority Institutions of Higher Education (MIHE) Forum, Miami, February 2016
11. Logistics Initiative, Palm Beach North Chamber, January 2016
12. Southeast Florida FSUTMS Users Group: Freight Data Collection and Modeling, Miami, November 2015.
13. Florida Transit Signal Priority and Queue Jump Forum, Palm Beach, Florida, October 2015.
14. Spatial Innovation, 2015 South Florida GIS Expo, West Palm Beach, October 2015.
15. Construction Career Day South Florida, Davie, Florida, October 2015.
16. ITEGold Coast Chapter Meeting, Fort Lauderdale, October 2015.
17. Florida Department of Transportation-FAU, May 2015
18. Construction Career Day Central Day, Orlando, Florida, January 2015.

19. North Carolina Department of Transportation, “Multimodal Intelligent Transportation Systems Laboratory: Congestion Management” January 2015.
20. Maryland State Highway, “Freight Fluidity and Movement Efficiency” Baltimore, Maryland, December 2014.
21. Palm Beach State College, Boca Raton, Discover Geomatics and Civil Engineering Forum, November 2014.
22. District 10/ FL State ITE Annual Meeting, November 5-7, 2014, Boca Raton, FL.
23. Infrastructure Night, Member of the CEGE panel to meet with FL DOT Secretary Mr. Ananth Prasad, Oct. 2014
24. Construction Career Day South Florida, Davie, Florida, October 2014.
25. Spatial Innovation, 2015 South Florida GIS Expo, West Palm Beach, October 2014.
26. Construction Career Day Central Day, Orlando, Florida, January 2014.
27. Women Transportation Society Annual Scholarship Awards, Spring 2014.
28. Transit & Rail Committee Meeting –South Florida January, 2014
29. Palm Beach State College, Boca Raton, Discover Geomatics and Civil Engineering Forum, March 2013.
30. Women Transportation Society Annual Scholarship Awards, Spring 2013.
31. Attended and Presented at the UTC Conference for Southeastern Region, Orlando, FL April 2013.
32. Transit & Rail Committee Meeting –South Florida, February, 2013.
33. FHWA ATDM Workshop, Ft. Lauderdale, FL., June 2012
34. Women Transportation Society Annual Scholarship Awards, Spring 2012.
35. Florida Freight Task Force, (FDOT Invitation) Tallahassee, Spring 2012.
36. Florida Energy Systems, University of Central Florida, Spring 2012.
37. South Florida Women’s Transportation Seminar, February 2012, Ft. Lauderdale, FL

Invited Speaker (Seminars and Workshops)

1. Invited Speaker, “Freight Logistics in Florida”, Florida Chamber of Commerce, Florida Polytech, Orlando, Spring, 2017
2. Invited Speaker, “Preparedness and Catastrophic Events Management”, National Technical University of Athens, and University of Piraeus, Athens Greece, Summer Workshops/Seminars/Transportation Course, 2010 to present
3. Invited Speaker, “Multimodal Intelligent Transportation Research Laboratory: Preparedness and Catastrophic Events Management Application”, University of South Florida, Transportation Research Seminar, Fall 2014.
4. Invited Speaker “Intermodal Transportation and Terminal Operations” District 10/FSITE Annual Meeting November, 2014.
5. Invited Speaker, “Systems Engineering Modeling and Analysis”, University of Maryland at College Park, Spring 2014.
6. Invited Speaker, “Preparedness and Catastrophic Event Management for the Washington DC Area”, Preparedness for Mass Transit Symposium, Washington Metropolitan Area Transit Authority, Washington DC, Spring 2010.
7. Invited Speaker, “Preparedness and Catastrophic Events Management”, Ministry of Transportation, Athens Greece, Summer 2010.
8. Invite Speaker, “Simulation Based Emergency Response and Preparedness Case Study: Baltimore Metropolitan Area”, ASCE Florida Chapter Meeting, West Palm Beach, FL, Fall 2009.
9. Invite Speaker, “Center for Intermodal Transportation Safety and Security”, Airport Security Workshop, Miami, FL, Spring 2009.
10. Invited Speaker, “Evacuation Research and Challenges using Micro-simulation Platforms”, Emergency Evacuation Subcommittee, Transportation Research Board Annual meeting, Spring 2009.
11. Invited Speaker, “Innovate Intersections and Interchange Designs” ASCE Chapter Meeting, Boca Raton, Florida, Fall 2008.
12. Invited Speaker, “Research Review and Container Terminals Future”, Intermodal Freight Terminal and Operations Committee (AT050). Transportation Research Board, Spring 2008.

13. Invited Speaker, "Congestion and Arterial Management" FIU-ITE Student Chapter Meeting, Miami, Fall 2008.
14. Invite Keynote Speaker, "Enhanced Micro-Simulation Models for Accurate Safety Assessment", FAU-ASCE Chapter Meeting, South Florida, Spring 2008.
15. Invited Keynote Speaker, "Intersection Safety and Congestion Relief Using Mostly Non-Traditional Treatments" ITE Golden Chapter Meeting, Boca Raton Florida, Fall 2007.
16. Invited Speaker, "Innovate Ideas for Transportation Problems" FAU Research Symposium, Jupiter, Spring 2007

PROFESSIONAL DEVELOPMENT AND RESEARCH/EDUCATIONAL TRAINING:

1. Volunteer, FAU College of Engineering and Computer Science, Open House 2006, 2007, 2009, 2011, 2013, 2014, 2015.
2. Competition Advisor, ITE Student Chapter, ASCE Southeast Regional Student Conferences, 2006 to present.
3. Panelist, FAU Infrastructure Night, Speaker, Brian Blanchard, FL FDOT Secretary, October 2015.
4. Panelist, FAU Infrastructure Night, Speaker, Ananth Prasad, FL FDOT Secretary, October 2014.
5. Volunteer Instructor, FE Review Session for Transportation Engineering, 2006 to present.
6. Judge, Broward County MathCounts Program, Fall 2006, 2008, 2010.
7. Judge, Broward County Engineering Program, Spring 2007.
8. Moderator, Preparedness and Catastrophic Event Response, Bioterrorism Meeting. Boca Raton, FL Spring 2009.
9. Moderator, Preparedness and Catastrophic Event Response, M&S Meeting. Boca Raton, FL Spring 2008.
10. Moderator, Preparedness and Catastrophic Event Response, M&S Meeting. Jupiter, FL Spring 2007.
11. Volunteer; ABET Civil Engineering Evaluation Visit, FAU-Boca Raton Campus, Boca Raton, FL October 2014.
12. Volunteer; ABET Civil Engineering Evaluation Visit, FAU-Boca Raton Campus, Boca Raton, FL October 2008.
13. Moderator, Third ASCE Conference on Applications of Advanced Technology in Transportation, Athens, Greece, Summer 2008.
14. Invite Participant, NSF Workshop, Melbourne, FL, Fall 2009.
15. Faculty Learning Community: "Assessment Technologies and Strategies," Boca Raton, FL, Fall 2010-Spring 2011.
16. Faculty Learning Community: "Engineering Sustainability," Boca Raton, FL, Fall 2010-Spring 2011.
17. Faculty Participant, Science, Technology, Engineering and Math (STEM), National and Community Service 2010-2011.
18. Faculty Learning Community: "eLearning Assessment," Boca Raton, FL, Fall 2011-Spring 2012.

Proposal Evaluator

- Pacific Transportation Consortium (PacTrans)
- Center for Intermodal Transportation Safety and Security
- Oregon Transportation Research and Education Consortium
- Nexttrans, Transportation Center, Purdue University
- Southeastern Transportation Research, Innovation, Development and Education Center (STRIDE)

PROFESSIONAL SOCIETY MEMBERSHIPS:

- American Society of Civil Engineers (ASCE) Security Subcommittee, 2013 to present.
- Institute for Operations Research and the Management Sciences (INFORMS), 1998 to present.
- Institute of Transportation Engineers (ITE), Member, 2006 to present.
- ITE - Student Chapter Member at the University of Maryland 1997 to 2006.
- American Society of Civil Engineers, (ASCE) Student Member, 1998 to 2006.

- Intelligent Transportation Society (ITS) of America, Student Member, 2003 to 2006.
- Intelligent Transportation Society (ITS) of America, Associate Member 2009 to present.
- Transportation Research Forum.
- International Road Federation.
- American Society for Engineering Education, 2009 to present.

ACADEMIC SERVICE (SELECTED):

Department of Civil, Environmental and Geomatics Engineering

- Director, Freight Mobility research Institute (FMRI) 2016 to present
- Director of Geomatics and Transportation Engineering Program. 2012 to present
- Director of Transportation Studies. 2006 to present
- Director of Multimodal Intelligent Transportation Systems Laboratory. 2006 to present
- Departmental Computing Committee. 2006 - 2008
- Civil Engineering (Transportation) Faculty Search Committee. 2008 – 2009
- Geomatics Engineering/Environmental Engineering Faculty Search Committee 2013 – 2014
- Policy and Development Committee 2013 to present
- Undergraduate Curriculum Committee. 2009 to present
- Departmental Graduate Committee. 2009 to present
- Student Advisor, Institute of Transportation Engineer, Student Chapter. 2010 to present
- PhD Task Force. 2009 to present
- Transportation Development. 2006 to present

Center for Intermodal Transportation Safety and Security

- Research Associate and Affiliate 2006 - 2009
- Center Computing Committee. 2006 - 2009
- Coordinator for the Transportation Center’s Presentations. 2006 - 2009

College of Engineering and Computer Science

- Research Committee. 2009 to 2015
- Policy and Development Committee 2015 to present

Florida Atlantic University

- Faculty Senator, Member. 2008 to present
- Senate Distance Education Committee 2015 to present
- Honors & Award Committee (Chair) 2006 to present
- Traffic & Parking University Committee 2010 to present
- Transportation Committee 2011 to present
- Admission and Retention Committee 2013 to present
- Roadway Lighting Committee 2017 to present

COMMITTEE MEMBERSHIPS:

Transportation Research Board

Committee on Intermodal Freight Terminal Design and Operations AT050, Transportation Research Board, Academy of Science

- Member since 2007
- Paper review coordinator since 2013

Committee on Emergency Evacuation ABR30, Transportation Research Board, Academy of Science

- Member since 2014
- TRB Subcommittee of Emergency Evacuation, since 2007

TRB Network Modeling Committee (A Friend).
 TRB Committee on Highway Capacity and Quality of Service (A Friend).
 TRB Traffic Flow Theory Committee (A friend).
 TRB Subcommittee on Network Transit and Commercial Fleet (A Friend).
 TRB Subcommittee on Network Equilibrium Modeling (A Friend).
 TRB Operational Effects of Geometric Design Committee (A Friend).
 TRB Access Management Committee (A Friend).

Conference/Workshops Organizing

Workshop on Enhancing Resiliency on Maritime Ports, Diana Beach, Florida	Fall 2017
Moderator, Transportation Research Board, Washington D.C.	2010 to present
Moderator, Institute for Operations and the Management Sciences (INFORMS)	2006 to present
Moderator, National Evacuation Conference, New Orleans, Louisiana	2010, 2012, 2016

Service on an Editorial Advisory Board or Reviewer of a Scholarly Journal

Associate Editor: IEEE transactions on Intelligent Transportation Systems
 Associate Editor for International Journal of Vehicular Telematics and Infotainment Systems
 Editor of Special Issue of Catastrophic Events Management- International Journal of Transportation

Invited reviewer for the following publications:

Elsiever Publishing
 Springer Publishing
 ASCE Journal of Transportation Engineering
 ASCE, Journal of Computing in Civil Engineering
 Journal of Advanced Transportation
 Journal of Computer-Aided Civil and Infrastructure Engineering
 Journal of Economic Forum
 Journal of Emergency Management
 Journal of Intelligent Transportation Systems
 Journal of Open Economics
 Journal of Socio-economic Planning Sciences
 Journal of Transportation Research Record
 International Journal of Sustainable Transportation
 International Journal of Disaster Risk Reduction
 Journal of Homeland Security and Emergency
 The Open Economics Journal
 Transportmetrica A: Transport Science
 Transportation Research, Part C: Emerging Technologies
 Transportation Research, Part E: Logistics and Transportation Review
 Transportation Science
 Simulation Interoperability Standards Organization
 Sustainability-Open Journal
 World Review of Intermodal Transportation Research (WRITR)

Served as Reviewer for National and International Conferences, Samples:

Transportation Research Board Annual Meetings, Washington DC, 1998 to present.
 International Symposium on Highway Capacity and Quality of Service, 2011 to present.
 Twelfth World Congress on Transportation Research, Lisbon, Portugal, 2010.

Tenth ASCE Conference on Applications and Advanced Technology in Transportation, Athens, Greece, 2008.

World Multiconference on Systemics, Cybernetics and Informatics, 2007, 2008, 2009, 2011

Ninth International Conference on Applications of Statistics and Probability in Civil Engineering, San Francisco, CA, 2003.

Invited Panelist for the following **National Academies of Science** Programs:

Hazardous Material Cooperative Highway Research Program

Project HM-17, FY 2011: Methodology for Evaluating the Effectiveness of Hazardous Materials Transportation Training

National Cooperative Highway Research Program

Project 22-30, FY 2014: In Service Evaluation of End Terminals.

Project 08-93, FY2014: Guidebook on Agency Risk Management Strategies, Methods, and Tools.

Project 19-11, FY 2014: Changing the Game: Innovative Solutions to Allocate Risk and Deliver Projects Successfully under Constrained Budget Conditions

Project 03-102, FY-2011: Design Guidance for Intersection Auxiliary Lanes

Project 20-59(32), FY-2009: A Transportation Guide for All-Hazardous Emergency Evacuation

Project 03-89, FY-2008: Design Guidance for Channelized Right –Turn Lanes

National Cooperative Freight Research Program

Transit Cooperative Highway Research Program

Project F-18, FY 2011: A Guide to Public Transportation Policing and Security for the Small and Medium Transit System

Project A-36, FY 2010: Command Level Decision for Transit Emergency Managers

Invited Reviewer

Center for Intermodal Transportation Safety and Security

Oregon Transportation Research and Education Consortium

Mettrans Transportation Center

Next Generation Transportation (NEXTRANS) USDOT Region V Regional Transportation Center

Southeast Transportation Research Innovation, Development and Education Center (STRIDE) USDOT

Region IV Regional Transportation Center

National Science Foundation, Cyber-Physical Systems (CPS) Program

Qatar National Research Foundation