Samantha Islam, Ph.D., E.I.T. Department of Civil Engineering, Shelby Hall, Suite 3142 University of South Alabama Mobile, AL 36688

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EDUCATION

- Ph.D. Civil Engineering. Purdue University, 2005.
- M.S. Civil Engineering. Purdue University, 2002.
- B.Sc. Civil Engineering. Bangladesh University of Engineering and Technology, 1999.

PROFESSIONAL EXPERIENCE

Associate Professor (August 2014 – Present). University of South Alabama, Mobile, AL.

Assistant Professor (August 2008 – July 2014). University of South Alabama, Mobile, AL.

Engineer I (January 2006 – June 2008). Volkert and Associates, Inc.

Graduate Assistant (1999 – 2003). Purdue University, West Lafayette, IN.

RESEARCH INTERESTS

- Transportation and Infrastructure Systems
- Application of econometric and statistical methods to:
 - highway/traffic safety
 - traffic congestion
 - $_{\odot}$ transportation economics
- Design and Operations of Roundabouts
- Roadway Departure Accidents
- Application of ITS
- Traffic Operations and Control
- Transportation Planning
- Hurricane evacuation

COURSES TAUGHT

COURSE NO

<u>TITLE</u>

<u>Undergraduate Courses:</u> EG 101 CE 102 CE 204	Introduction to Engineering and Design Introduction to Civil Engineering Surveying Fundamentals
CE 204 CE 352 CE 431	Transportation Engineering Civil Engineering Design I

Graduate Courses:	
CE 590	Transportation System Evaluation
CE 590	Highway Safety
CE 551	Traffic Engineering
CE592	Directed Independent Study
CE 594	Projects in Civil Engineering

PUBLICATIONS

Most Recent Refereed Journal Publications:

- 2016: Islam, S., Hossain, A.B., T. Barnett. Comprehensive Injury Severity Analysis of Sport Utility Vehicle and Pickup Truck Rollover Crashes on Roadways in Alabama, to appear in *Transportation Research Record: Journal of the Transportation Research Board*, 2016.
- 2015: Islam, S. Comparative Analysis of Injury Severity Resulting from Pedestrian–Motor Vehicle and Bicycle–Motor Vehicle Crashes on Roadways in Alabama, *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2514, 2015, pp. 79-87, 2015.
- 2014: Islam, S. and Jones, S., "Comprehensive Analyses of Single- and Multi-vehicle Large Truck At-fault Crashes on Rural and Urban Roadways in Alabama", *Accident Analysis and Prevention*, 67, pp148-158, 2014.
- 2014: Islam, S. and Jones, S., "Pedestrian At-Fault Crashes on Rural and Urban Roadways in Alabama", *Accident Analysis and Prevention*, 72C, pp 267-276, 2014.
- 2013: Islam, S. and Brown, S., "Transportation-OPOLY: An Innovative Tool to Promote Transportation Engineering", International Journal of Traffic and Transportation Engineering, Vol.2 No.3, 2013.
- 2010: Turner D., Evans W., Kumlachew M., Wolshon B., Dixit V., Sisiopiku V.P., Islam S., Anderson M., "Issues, Practices, and Needs for Communicating Evacuation Information with Vulnerable Populations," *Transportation Research Record: Journal of the Transportation Research Board*, No. 2196, pp 159-167, 2010.
- 2006: Islam, S. and Mannering, F., "Driver Aging and its Effect on Male and Female Single-Vehicle Accident Injuries", *Journal of Safety Research*, Vol.37, pp. 267-276, 2006.

Most Recent Refereed Conference Publications:

- 2013: Islam, S, Russ, S. H., and White, K. D., "Assessment of Spatial Visualization Skills in Freshman Seminar", *Proceedings of the International Conference for Engineering Education 2013*, Atlanta, Georgia, June 2013
- 2013: Islam, S and Parks, J, "Cost Effective Dredging in Mobile Bay: Possibilities for Sustainable Dredged Material Management', Proceedings of the 92nd Transportation Research Board Annual Meeting, Washington, DC, January 2013.
- 2012: Islam, S. and Brown, S. "Youth Transportation Institute: An Undergraduate Research Initiative to Promote Transportation Engineering", Proceedings of the 2012 ASEE Southeastern Section Conference, Starkville, MS, April 1-3, 2012.
- 2010: Turner, D. S., W. A. Evans, B. Wolshon and V. Dixit, V. P. Sisiopiku, S. Islam and M. D. Anderson, "Issues, Practices, and Needs for Communicating Evacuation Information with Vulnerable Populations", Proceedings of the 89th Transportation Research Board Annual

Meeting, Washington, DC, January 2010.

- 2003: Islam, S., Loehman, E.T., and Sinha, K.C., "Non-Market Benefits of Automobile Crash Reduction Factors", Proceedings of *the* 82nd Annual Meeting of the Transportation Research Board, 2003.
- 2000: Islam, S., Loehman, E.T., and Sinha, K.C., "Willingness to Pay to Avoid Statistical Risk of Injuries and Death from Motor Vehicle Accidents", *Proceedings of Economic Science Association Regional Conference with Special Emphasis on Economics and Psychology*, Tucson, Arizona, September 29-October1, 2000.

PRESENTATIONS

- 2016: Islam, S. (Author & Presenter), 95th Transportation Research Board Annual Meeting, "Comprehensive Injury Severity Analysis of Sport Utility Vehicle and Pickup Truck Rollover Crashes on Roadways in Alabama," The National Academies of Sciences, Washington Dc. (January 11, 2016).
- 2015: Islam S, Gordon JS, Grala R, Wesley J (2015, Nov 16-19) Open Space as a Waterfront Use: A Mixed Methods Study on the Gulf Coast. Paper presented at the National Working Waterfront and Waterways Symposium, Tampa, FL.
- 2015: Gordon J, Grala R, Islam S, Wesley J (2015, June 13-18) The Value of Open Space as a Waterfront Use. Paper presented at the 21st International Symposium for Society and Natural Resource Management, Charleston, SC.
- 2015: Islam S., Transportation Research Board 94th Annual Meeting, "Comparative Analysis of Injury Severity Resulting from Pedestrian- and Bicycle-Motor Vehicle Crashes on Roadways in Alabama," The National Academies, Washington DC. (January 13, 2015).
- 2013: Islam, S., "Large Truck At-Fault Accidents: An Injury Severity Study", *Gulf Region Intelligent Transportation Society (GRITS) Annual Meeting*, New Orleans, Louisiana, September 18, 2013.
- 2013: Islam, S., "Pedestrian At-Fault Accidents: Injury Severity Analyses", *Bicycle and Pedestrian Advocacy Committee (BPAC) Meeting*, South Alabama Regional Planning Commission, Mobile, Alabama, August 15, 2013.
- 2013: Islam, S and Parks, J., "Economic Assessment of Dredging Operations in Mobile Bay, USA and Some Additional Notes on Sustainable Management of Dredged Material", 2013 ASCE Alabama Section Summer Meeting in Orange Beach, Alabama, August, 2013.
- 2013: Islam, S, Russ, S. H., and White, K. D., "Assessment of Spatial Visualization Skills in Freshman Seminar", 2013 International Conference for Engineering Education, Atlanta, Georgia, June 2013.
- 2013: Islam, S and Parks, J, "Cost Effective Dredging in Mobile Bay: Possibilities for Sustainable Dredged Material Management', 92nd Transportation Research Board Annual Meeting, Washington, DC, January 2013.
- 2012: Islam, S and Brown, S., "Youth Transportation Institute: An Undergraduate Research Initiative to Promote Transportation Engineering", 2012 ASEE Southeastern Section Conference, Starkville, MS, April, 2012
- 2012: Islam S. and Mannering F., "Male/Female Driver Characteristic and Accident Risk", USA Gender Studies Lecture Series Spring 2012, Gender Studies Program, an Interdisciplinary program of USA in College of Arts and Science.
- 2011: Parks, J. and Islam, S., "A Comparative Look at Pipeline and Hopper Dredging of the Mobile Bay", Poster presented at the USA Undergraduate Research Symposium, October 2011.

• 2009: Islam, S and Mannering, F., "Driver Aging and its Effect on Single Vehicle Accident Injuries", 2009 ASCE Alabama Section Summer Meeting in Orange Beach, Alabama, July, 2009.

MOST RECENT FUNDED RESEARCH

- 1. Development of Safety Performance Functions (SPF) and Part C Crash Modification Factors (CMF) for Rural Local Roads in Alabama. Alabama Department of Transportation (ALDOT), 2014-2016.
- 2. The Value of Open Space as a Waterfront Use: a Mixed Methods Study on the Gulf Coast, Sponsored by Mississippi-Alabama Sea Grant Consortium. July 1, 2014 2016.
- 3. Development of Operational Guidelines for Roundabouts in Alabama. Alabama Department of Transportation via University Transportation Center for Alabama (UTCA). 2013-2015.
- 4. Collecting Video Data for Calibration of Simulation Model at the Roundabout Location at the Intersection of Grelot Road, Air Terminal Drive and Dawes Road. Mobile County Engineer's Office. 2013-2014.
- 5. Realigning Multimodal Freight Networks in Response to International Capacity Expansion. USDOT, via University of Southern Mississippi. 2013-2014.

GRADUATE STUDENTS

Grace Toledo Nieto (current, thesis option), Aiman AlHdad (current, thesis option), Ranadeep Ravula (current, course work only), Terry Ward (Graduated 2015, Thesis option), Ariel Chavez (Graduated 2009, Project),

UNDERGRADUATE STUDENTS

Krista King*, Paxton Reiss*, Joshua Brown*, Samantha Hamilton*, Kamal Jabbour, Cody Wallace, Thomas Brymer, Jackson Corley, William Beck, Jedidah Oliphant, Jackie Parks, Sarah Brown.

* current

GRADUATE STUDENT ADVISING – Membership on Graduate Degree Committees

Jayaprakash Nalluri, Varun Kumar Nagelli, Surya Prakash Rao Puttamraju, Yoel Vaaldes Diaz, Samson Gebrewahid, Salah Momtaz, Sayna Ebrahimi, Sandeep Sreshtha

SERVICE TO STUDENT ORGANIZATIONS

Faculty Advisor, University of South Alabama Student Chapter of Gulf Region
Intelligent Transportation Society (GRITS).
Faculty Advisor, University of South Alabama Student Chapter of Soceity of Women
Engineers (SWE).
Faculty Advisor, University of South Alabama Student Chapter of Institute of
Transportation Engineers (ITE)
Faculty Affiliate of the University of South Alabama Gender Studies Program

PROFESSIONAL SERVICE

2009 – present Member of ANB10(4) the TRB (Transportation Research Board) Subcommittee on Emergency Evacuation

OUTREACH ACTIVITIES

2012: Participated in summer camp activity, SCREAM in summer 2012 2011: Participated in summer camp activity, SCREAM in summer 2011 2010: Participated in summer camp activity, SCREAM in summer 2010

REFEREE WORK FOR JOURNALS/CONFERENCE PROCEEDINGS:

Journal/ Conference Proceedings Transportation Research Record Journal of Transportation Safety and Security Journal of Emergency Management Transportation Research Board Annual Meeting ASEE Southeastern Section Annual Conference ASCE, Transportation and Development Institute, Green Streets, Highways and Development Conference ASCE, Transportation and Development Institute, 3rd International Conference on Urban Transportation Systems