



# UTC Spotlight

University Transportation Centers Program

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## Summer Internship Offers Real-World Research Experience to Undergrads

A major focus of the Center for Advancing Transportation Leadership and Safety (ATLAS Center) is to support the development of a transportation workforce capable of designing, deploying, operating, and maintaining complex transportation systems of the future. To this end, the ATLAS Center, led by the University of Michigan in collaboration with Texas A&M University (TAMU), seeks to increase the visibility of transportation as a career choice by supporting interdisciplinary transportation education and research related to transportation safety.

One of the Center's main education programs is the Summer Internship Program, a 10-week program that provides an opportunity for outstanding undergraduate students from various universities to engage in transportation safety research with faculty mentors from the Texas A&M Transportation Institute (TTI) and TAMU. The structured and intensive research environment allows interns to make a contribution to ongoing research and further their knowledge of the transportation safety field.

The summer internship coincides and is coordinated with other summer intern programs at TAMU, funded by the National Science Foundation, that provide an opportunity for interns to interact with students in other disciplines



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The 2014 interns attended a crash test at the TTI-Riverside campus.



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Interns attended a crash test at TTI-Riverside with ATLAS and TTI Researcher, Chiara Silvestri Dobrovolny (far left) and other test guests.

and participate in university-wide seminars, tours, poster sessions, and other events. To date, 12 undergraduate students from 5 universities have participated in the internship program.

Interns have a wide array of academic majors, including engineering, earth and environmental science, history, and political science. The diverse specializations available through partnerships between TTI and the TAMU system enable students to obtain training tailored to the current demands and needs of the transportation field and to interact with researchers doing work in fields in which the students are interested. Research areas studied by the interns include older driver safety, crash and injury data linkages, variable speed limits, pedestrian behavior, and work zone safety.

The internship program aims to provide a high-impact learning experience that integrates classroom and lecture learning with real-world research experience. In addition to working with their research mentors, the interns participate in a variety of supplemental activities. Throughout the past two summers, the TAMU Honors and Undergraduate Research program presented a series



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Marci Early and George Gillette give presentations at the 2016 TRB in Washington, D.C.

of brown bag presentations. Topics included applying for national fellowships and graduate school, writing abstracts, and preparing research posters. Researchers from TTI presented a series of brown bag presentations exclusively for the ATLAS Center interns, introducing them to safety-related research being conducted at TTI. The interns also attended a vehicle crash test at TTI's Riverside campus, including an introductory tour of the crash test modeling facilities and associated laboratories. The 2015 interns were also offered the opportunity to attend a Graduate Record Examination (GRE) preparation course as well as attend the TTI/ATLAS-sponsored Traffic Safety Conference in Corpus Christi, Texas.

At the conclusion of the program, interns produce a final research paper, as well as a project poster, summarizing their project work. Posters are presented at a campus-wide event with the other TAMU summer interns in engineering and science fields during the final week of their internships. Three interns opted to format their final papers for submittal to the Transportation Research Board Annual Meeting, and all three papers were accepted for presentation at the conference.

Graduates of the internship program have gone on to a variety of careers and post-graduate schooling, including continuing graduate work in Community and Regional planning at the University of Texas-Austin, conducting medical research at the National Institutes of Health,

and working at the University of Michigan Transportation Research Institute and TTI. The ATLAS Center has received very positive feedback from interns, mentors, and other staff at TTI regarding the program. Bill Stockton, Executive Associate Agency Director at TTI said, "We have found the summer interns to be a tremendous benefit to us. They are smart, energetic, and keenly interested. The new vision and enthusiasm they bring enhances the research and energizes those around them. We are grateful to the interns for the time they spend with us and to ATLAS for making this excellent program possible."

The internship program structure promotes the truly interdisciplinary education and training needed to develop specialized professionals who can tackle the transportation needs of society—today and in the future. Michael Manser, Senior Research Scientist at TTI and mentor to ATLAS interns, said, "The summer interns have served as the cornerstone for the development of new and promising research areas that are expected to improve transportation safety for our society. The students infuse a fresh and highly relevant perspective to these new research areas that truly adds value to the project. Without their support much of this work would not advance beyond the conceptual stage of development." The ATLAS Center is looking forward to supporting another group of students for next summer's internship program.

### About This Project



The Center for Advancing Transportation Leadership and Safety (ATLAS Center) is a Tier 1 UTC led by the University of Michigan Transportation Research Institute (UMTRI) in collaboration with the Texas A&M Transportation Institute (TTI). The Center theme is "Integrated Solutions for Transportation Safety." Visit [www.ATLAS-Center.org](http://www.ATLAS-Center.org) for more information about Center activities.

*This newsletter highlights some recent accomplishments and products from one University Transportation Center (UTC). The views presented are those of the authors and not necessarily the views of the Office of the Assistant Secretary for Research and Technology or the U.S. Department of Transportation.*

