OVERVIEW

As a Regional University Transportation Center (UTC), the Southern Plains Transportation Center (SPTC) is committed to strengthening the UTC program’s legacy of invaluable contributions to transportation education and workforce development by executing a comprehensive strategy keyed to the complimentary life-long learning themes of higher education, professional development, encouraging new ideas and new entrants to the profession, as well as K-12 outreach. This lifelong approach is particularly relevant in Region 6. The region’s underrepresented groups – Hispanic, African-American, Native American and women – are best served by early intervention, targeted higher education, and continuing education. An important element of SPTC’s workforce development effort is the Transportation Regional Internship Program (TRIP).

TRIP PARTICIPANTS

Approximately 40 students participate annually in this program to gain valuable professional experience by working for a transportation-related company or for a government organization/agency such as department of transportation. Since State of Good Repair and Climate-Adaptive Freight and Transportation Infrastructure are SPTC’s focus, a diverse set of topics are covered by this regional internship program, including design, construction, testing (laboratory/field), management, compliance, safety and training. Some of the participants’ experiences are highlighted here.

Ofelia Olvera Cancio was a student at the University of Oklahoma who worked with an engineering consulting company, EST, in 2014 and 2015, as a summer intern. She recently graduated and gained a full time position with the company. Her internship experience was instrumental to her integration into EST’s bridge division, where she aided in the bridge design and bridge rehabilitation process and submittal of plans for construction. She drafted bridge plans and checked redlines for bridge sheets, bridge quantities, traffic control, shop drawings and boring logs, among many more drawings in a complete set of plans.

Ofelia said, “The best thing about working at EST is that I have had exposure to the many phases involved in designing a bridge, from the beginning interview through the construction of the bridge.”

Josilyn Mitchell and Bradley Bridges successfully completed their internship rotations with the Arkansas State Highway and Transportation Department (AHTD). They gained valuable training. Now they have a better understanding of career opportunities within AHTD and other DOTs.

Daniel McFadden is an Engineering major at the University of New Mexico. He successfully completed his internship at a local company, Interstate Highway Construction. He was involved in concrete form design, project CPM scheduling, quantity estimating and construction cost estimating. Daniel said, “After completing my internship, I now know that I would like to pursue the transportation field after I graduate from engineering school.”
Efren Luevano Lopez is an Engineering major at Oklahoma State University. Efren's internship was focused on producing all-composite Adsorbed Natural Gas fuel tanks (ANG tank) that meet the requirements of the Federal Motor Vehicle Standards from the Department of Transportation (DOT) at the Oklahoma State University-CleanNG for the purpose of replacing metallic gas tanks.

His work involved designing and fabricating noncylindrical tanks that were pressure tested to determine burst pressure standards.

Mariana Maldonado is a Civil Engineering major at the University of Texas at El Paso (UTEP). She successfully completed her internship with AIA Engineers, LTD - a consulting engineering firm that provides engineering and construction services for the improvement of transportation systems. She assisted the Texas Department of Transportation (TxDOT) in bridge inspection. Her duties included measuring and documenting information on the scour and under clearance sections of the bridge folder and analysis of bridge supports using manual computations and software-based evaluations.

Jose Miramontes III is a Civil Engineering major at UTEP. As a TRIP intern, Jose checked the ADA compliance of 250 curb ramps that were scheduled for construction. His primary responsibility was to evaluate crosswalks to determine whether curb ramps should be added, repaired, or if new sidewalk installation was required. He was involved in taking field notes, conducting measurements and delivering specification-based implementation. Jose also drafted a full plan set and assisted in field quality assurance control for other multi-million dollar projects, including hot mix asphalt, landscaping and chip seal projects.

Janet Hernandez is a Civil Engineering major at UTEP. As a TRIP intern, she gained geotechnical engineering experience and knowledge such as taking a geotechnical course, receiving certification on various test procedures, running lab tests, and observing how tests are performed in the field. She also learned the planning and other steps involved in roadway projects. Janet said, “The most important aspect I take from this internship is networking and gaining real world experience in transportation engineering.”

ABOUT THE PROGRAM
More information about TRIP, including sponsors and participants, can be found at http://www.sptc.org in the STUDENTS tab, INTERNSHIPS link.