OVERVIEW: The Southern Plains Transportation Center and the Oklahoma Department of Transportation (ODOT) hosted the Oklahoma Transportation Research Day (OTRD) in October in Oklahoma City. The event presents and demonstrates new research and technology development. It consists of oral presentations, poster presentations, discussions, demonstrations and identification of potential research topics for ODOT, Oklahoma Turnpike Authority (OTA), Federal Highway Administration, and other transportation stakeholders. Eligible participants had the opportunity to receive eight (8) Professional Development Hours (PDH).

EVENT DETAILS: One-hundred and sixty eight (168) guests were in attendance. They represented academia, state/federal agencies, tribal organizations, and the private sector. National speakers addressed a wide range of topics within the subjects of Freight and Safety.

The keynote speaker was Elizabeth Alicandri, Associate Administrator of the US Federal Highway Administration whose talk entitled “Turning Safety Research into Saving Lives” presented methods for implementing research into every day processes. Some of the additional guest speakers included Stan Caldwell, Executive Director for Traffic21 Institute, Carnegie Mellon University, Henry Brown, P.E., Research Engineer, University of Missouri, Alan Stevenson, Assistant Division Engineer for ITS and Operations, Oklahoma Department of Transportation, David Yarborough, Director, Tulsa Port of Catoosa, City of Tulsa-Rogers County Port Authority, Craig Moody, Rail Programs Division Manager, Oklahoma Department of Transportation, and Caroline Mays, Director, Freight and International Trade Section, Texas Department of Transportation. Closing remarks were made by Mike Patterson, Secretary of Transportation and Executive Director of Oklahoma Department of Transportation.

The Equipment Demonstration Session featured equipment technologies such as a Concrete Tag (Ctag) by Dr. Tyler Ley, and the TCMS for Traffic Data Collection created by Dr. Hazem Refai. Dr. Joshua Li provided his Quantum Imager Triple Frequency Ground Penetrating Radar (GPR) and the Olson Light Weight Deflectometer (LWD) (pictured below). Dr. Julie Hartell demonstrated the Ultrasonic Pulse Velocity and Rebound Hammer and the Surface Resistivity and Pulse-echo Imaging Machine. Dr. Anol Mukhopadhyay demonstrated the abilities of the Accelerated Concrete Cylinder Test and the Volumetric Change Measuring Device. Matt Romero provided the MIT Scanner from ODOT. Dr. Ron Barnes presented web-based systems: SAFE-T (Statewide Analysis for Engineering and Technology) and OKRoads (Oklahoma Road Conditions).
Students showcased their research and competed in poster presentations for cash prizes which were provided by the Oklahoma Center for the Advancement of Science and Technology (OCAST). A total of 25 poster submissions were entered the competition, with several projects reflecting collaborative research within the SPTC consortium.

First place was awarded to Connor Dugan (pictured below), University of Oklahoma, for his work entitled, “Effects of Waste Vegetable Oil in High Concentration Recycled Asphalt Binder.”

Second place was awarded to Ning Lee, Oklahoma State University for her work entitled, “Laboratory Test on Slab/Base Friction in Concrete Pavement.” Third place went to Ahmed Gheni, Missouri S&T, for his work entitled, “Innovative Eco-Friendly Crumb Rubber Chip Seal Pavement”.

**IMPACT:** The ODOT-SPTC Oklahoma Transportation Research Day (OTRD) is a major technology transfer event in Oklahoma that enhances collaboration between transportation stakeholders.

**For More about the Event**
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