**NextGen’s Next Move**

ITRE’s NextGen Air Transportation (NGAT) program has made serious progress in flying their aircrafts. They have been flying almost weekly since June and have had double-digit flight hours for the past three months. Presently, NextGen has 11 aircraft and 15 certificates of authorization, while just recently, they have officially flown at 5 of 6 approved locations.

Hyde County airport has been frequently used for NGAT’s flying. With over 30,000 square miles to fly in and with the ability to fly up to 1,500 ft, the location is considered a “favorite spot to fly in,” according to Kyle Snyder, NextGen’s director. Another frequently flown location is Butner-Beef cattle farm, and in late November, NGAT acquired the rights to fly at Lake Wheeler, which should increase their flight time considerably.

NextGen flights reach across NC State University, which allows them to carry support and knowledge to programs of NC State. NGAT is currently working with the College of Agriculture and the College of Natural Resources to determine how their research interests align their own, as well as looking at other universities, such as Appalachian State University and UNCW, to see if similar research interests could be shared across campuses as well.

The FAA is expected to announce a university coalition that will be considered the UAS Integration Center of Excellence with research granted for the next 5-10 years, and NextGen serves as a core member of a partnership with 12 other schools with hopes of being chosen for this position. NGAT membership outreach activities will start at the first of the year to further increase awareness and support of their program.

NextGen has also expanded their team with the addition of John Gorman, as program manager, and Fred Livingston, working as a postdoc in systems engineering.

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**Award of Appreciation Presented to Linda Collier**

Linda Collier has served on the Board of Directors for the American Public Works Association (APWA)-Streets Division for 10 years. Each year, both Linda Collier and ITRE’s LTAP program coordinator Bill Woods, helps facilitate a conference promoting the Combined Equipment Services and Streets Division for people interested in both the APWA and ITRE’s Local Technical Assistance Program (LTAP) within North Carolina, considering that the LTAP program is highly involved with the NC Chapter of APWA.

On October 2nd at a luncheon in Hickory, NC President of the Streets Division, Ken Martin, and President of Equipment Services, Robert Wayne, presented Collier with an appreciation award, “In recognition of all of her hard work,” as her plaque hanging in her office reads. This award is considered to be the first that has been given to anyone, so Linda Collier felt extremely honored upon receiving the award. LTAP will continue to work with and be supportive of the APWA-NC chapter.
American Tobacco Trail Study Report

Members of ITRE staff, Thomas J. Cook, Sarah Worth O’Brien, Kristy N. Jackson, Sarah Searcy, and Daniel J. Findley, are studying the “Behavioral Effects of Completing a Critical Link in the American Tobacco Trail (ATT).”

This critical link included the construction of a bicycle and pedestrian bridge over Interstate 40 (I-40) and corresponding paved connections that joined to two unconnected trail segments at either end, forming a continuous 22-mi corridor of the ATT. Data that were collected before and after the addition of the bridge segment were compared to determine changes in trail usage that may indicate impacts on transportation, health, and economic behaviors from the construction of the critical link.

The researchers found that the before data suggested that the existing northern and southern segments of the ATT functioned as two separate trails. With the connection between the two installed, use of the American Tobacco Trail increased 133%, and an additional $3.7 million is spent annually on goods and services by those using the trail. The research also portrayed exceptional gains in the amount of physical activity and economic impact measured by people using the trail, occurring just three months after the opening of the bridge.

This ITRE led study provides empirical evidence that constructing bicycle and pedestrian facilities, particularly those that fill a critical link in a non-motorized transportation network, will result in measureable positive impacts. The full research report and brochure will be available on the ITRE website for download by the end of the month.

Shannon Warchol Receives Joel Leisch Fellowship Award

On November 13, Joel Leisch, a well-renowned transportation engineer, was a visiting lecturer at NC State’s Introduction to Traffic Engineering course, taught by ITRE’s Daniel Findley. Leisch’s presentation focused on the application of human factors to freeway/interchange traffic operations and geometric design.

This opportunity allowed our transportation engineering students to be exposed to the foundational work in highway engineering through the eyes of Joel Leisch, who presented original concepts and methodologies developed by his father, Jack E. Leisch, one of the fathers of geometric design in the U.S. Thus, this presentation allowed the students to understand core principles of highway design/engineering, which specifically included concepts regarding proper signage for exiting/entering highways and various design considerations for interchanges.

Later that day, at the NCSITE annual meeting, Leisch presented ITRE’s scholarship recipient, Shannon Warchol, with the Jack E. Leisch Memorial national award.

(left to right) Dr. Nagui Roushail, Shannon Warchol and Joel Leisch.