ISSUE: Money is often wasted due to double-planting areas in row crop production fields because of unavoidable overlap, such as end rows, point rows, and areas around internal field obstacles. Double-planting is costly due to wasted seed and potential yield losses from increased plant competition and/or reduced harvest efficiency in double-planted areas. However, Automatic Section Control (ASC) technology for planters provides control over planting operations by turning off sections or rows on the planter in areas of the field that had been previously planted or areas that have been marked not to plant. This technology provides Tennessee farmers the potential to lower seed costs due to reduction in double-planted acres and improve yield potential in these double-planted areas at harvest time.

WHAT HAS BEEN DONE: In a joint effort with Biosystems Engineering and Soils Sciences, we have developed a research and education program that evaluates the potential economics benefits from ASC technologies. Field days, county and multi-county meetings, and a decision-aid tool were used to help cotton and grain crop farmers make better decisions about the adoption of ASC on planters.

IMPACT: In 2012 we trained 31 individuals, mainly Extension personnel at UT, in the use of a decision-aid tool to evaluate financial feasibility of an investment in ASC for planters (http://economics.ag.utk.edu/ascce.html) through in-service trainings. We have helped farmers at field days to make better decisions based on information we have provided about the economics of ASC for planters. Approximately 200 individuals increased their knowledge about the potential economic benefits from the adoption of ASC for planters and learned how to use an interactive, computerized decision aid we designed to help farmers evaluate potential benefits of ASC and estimate the number of years it would take to recoup the cost of purchasing the ASC through their annual net cash revenue it generates.

ARTICLE: “The Economics of Automatic Section Control Technology for Planters: A Case Study of Middle and West Tennessee Farms” (http://tinyurl.com/MVarticle1)