Economies don’t live on bread alone. Among other things they need fuel and labor, and those topics received attention in mid-September at Atlanta’s Technology Square when three Georgia Tech graduate students reported on their recent research: biofuels, teleworking, and white-collar outsourcing.

The audience comprised economic developers, state government officials, and university researchers and students, and the occasion was the third annual read-out session by interns in the program: “The interns builds our knowledge to help entrepreneurs with real opportunities and gets the students directly involved with important industry problems. We’re glad to be part of this and hope to increase our involvement.”

Pat Sims, a community development manager with Georgia Power Company and a member of the intern selection committee, said of the effort: “Economic development is changing rapidly. We need fresh, new perspectives. Connecting with graduate students is an excellent way to do that.”

Todd Greene, director of Georgia Tech’s Community Policy and Research Services, took it a step further, noting, “We are cultivating future economic developers.” He added that the program hopes to eventually place interns in communities across the state to help overcome local and regional challenges.

Applicants are selected, at least in part, on the topics they suggest and approach they plan to take. Concerning biofuels, master’s student Steven Simms said that Georgia has considerable potential to produce biodiesel fuel from microalgae. He explained that different biodiesel crops, such as soybeans, have limitations on how much fuel they can produce annually. Single-cell algae, such as algae, show greater potential, don’t compete with a food product like corn does, and have the additional capability of cleaning power-plant exhaust gas. Commercial viability will take more research, he said, but the expertise at Georgia Tech, the University of Georgia, and other institutions can make it a reality. He added that firms in Taiwan, Australia, the Netherlands, and elsewhere are exploring this.

Telework, or telecommuting, is often touted as a way of reducing air pollution by cutting vehicle trips, especially in the public sector. But doctoral candidate Nathan Moon found that in the private sector companies implement it for greater job satisfaction (an important human capital issue), higher productivity (more so by workers than managers), and lower operating costs, factors noted one participant, that could make telework a recruiting tool. Among the principal challenges are telecomm infrastructure costs and establishment of management support; success factors, he said, range from technological considerations and training to support of upper management. His findings, he said, are applicable to rural as well as metro areas. Georgia, he added, is addressing private-sector telework in policy-making, but outcomes of legislation are unclear.

Another doctoral student, Taner Osman from England, investigated outsourcing of service occupations, such as finance, insurance, call centers, and software programming.

This phenomenon was nothing new in the manufacturing sector, but it’s only been six years or so that economists have recognized it’s happening in offices as well as on the shop floor. Among nearly five dozen vulnerable occupations, said Osman, are management analysts, actuaries, technical writers, budget analysts, graphic designers, statisticians, and computer programmers—in short, jobs where information is a major component, working remotely is a facet, and face-to-face communication is not required. From an economic development perspective, he said, it’s important to understand the mix of occupations and the basis for competition, such as cost and infrastructure. And he suggested that making appropriate retraining available for these workers is critical.

Georgia Power’s Pat Sims said the program’s research projects hold “a wealth of information,” and indicated Georgia Power is pursuing all the topics presented. “We’ll continue to support the program,” she said.

Added Don Betts, representing another sponsor, the state’s Centers of Innovation and Vitalia, “The cutting-edge work by