

Industrial Siting Model



Biofuels Facility Location Analysis Modeling Endeavor

Tun-Hsiang “Edward” Yu

Assistant Professor

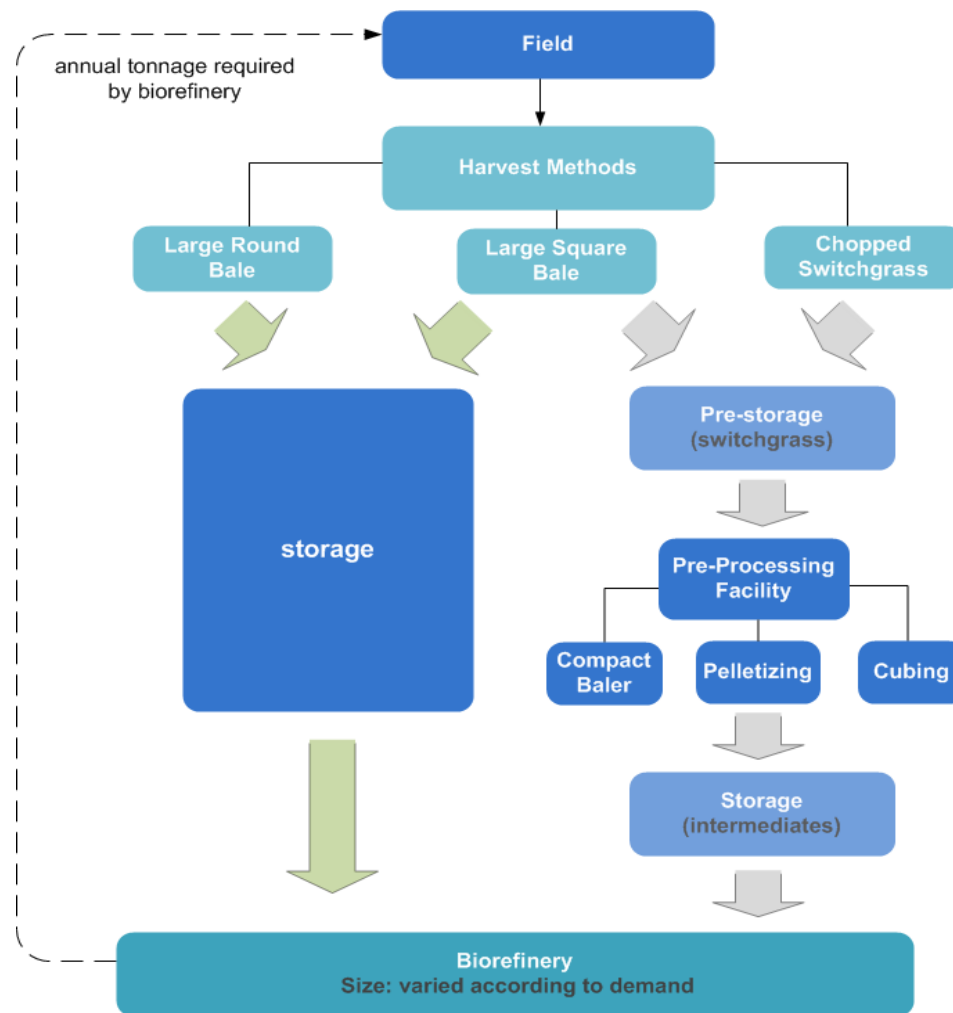
Department of Ag and Resource Economics

University of Tennessee

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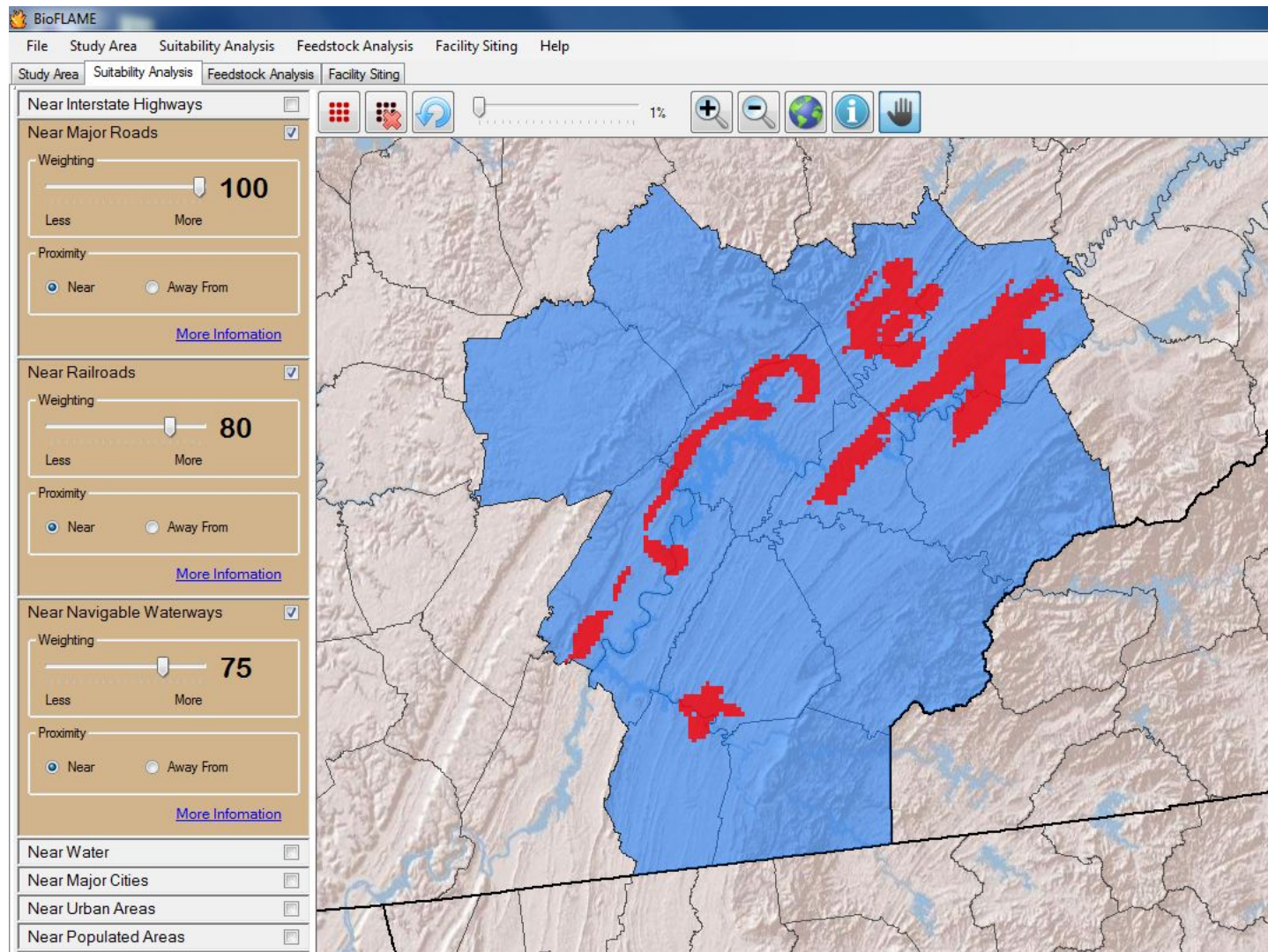
An example of biomass feedstock supply chain



Key developments of BIOFLAME

- A GIS modeling system developed by Brad Wilson
- Primary goals:
 - assess potential feedstock across a region, and
 - identify suitable locations for biorefineries that minimize costs (feedstock procurement and transportation) while satisfying industrial requirements via a flexible suitability analysis
- Use remote sensing data to analyze feedstock availability at the sub-county level and street level network analysis to estimate transportation costs of hauled cellulosic material from the field to facility
- A flexible suitability analysis allows for sites to be situated near or away from a variety of geographic features that may be important to a particular scenario

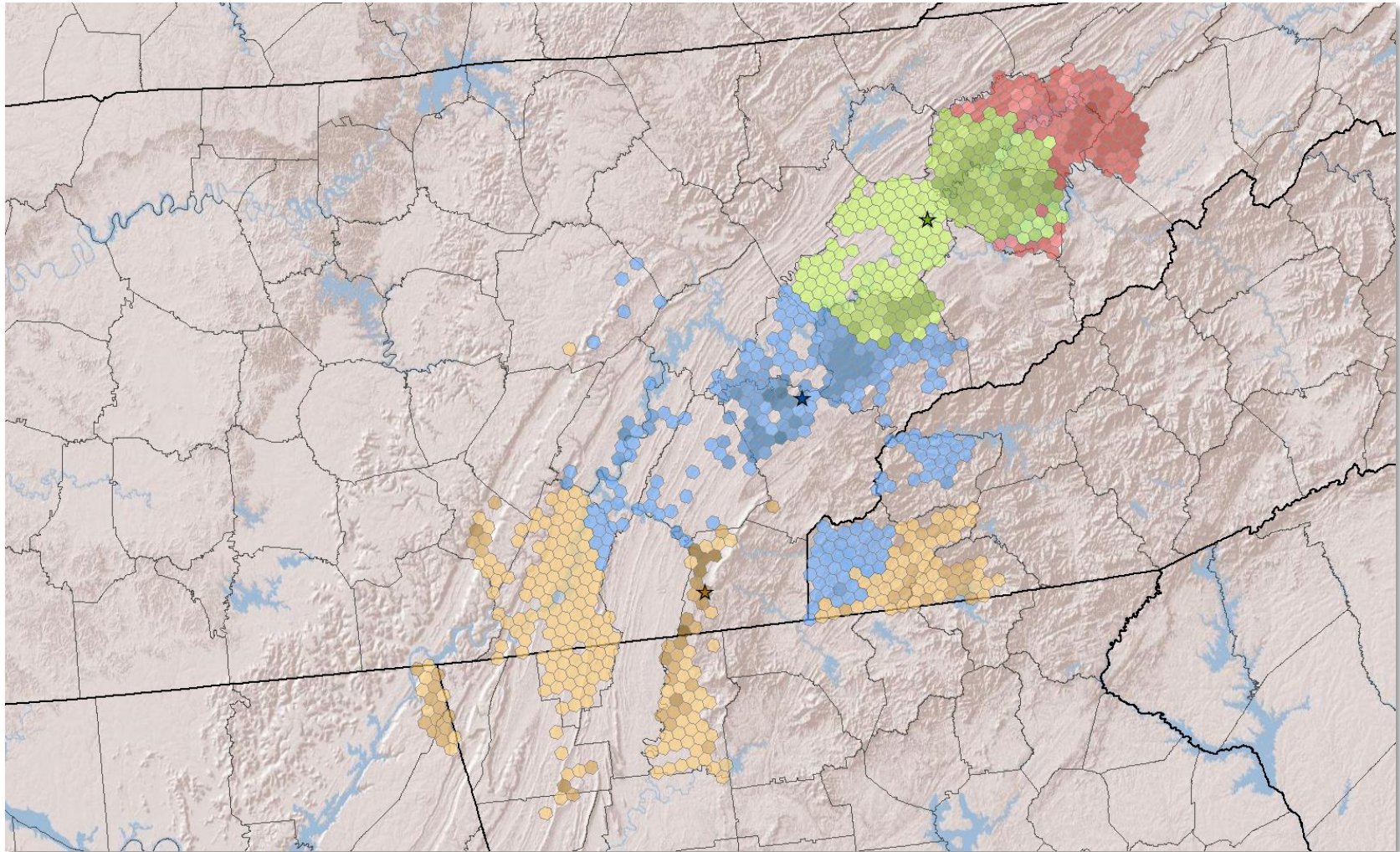
User interface showing suitability analysis being performed on study area



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Model output showing biorefinery and preprocessing facility sites with associated feedstock supply



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Continuous expansion!!

- Recent additions
 - Siting of preprocessing facilities
 - Hauling of preprocessed material
 - Additional harvesting methods
 - Batch job capability
 - Industrial park site selection
- Future plans
 - Expansion from southeast to entire nation
 - Additional feedstocks
 - Additional transportation modes

Thank You

Questions & Comments?!

Edward Yu: tyu1@utk.edu