# A SIMULATION PROGRAM EXAMINING THE CAUSALITIES UNDERLYING LAND, AGRICULTURE, TRANSPORTATION AND ENERGY RELATIONSHIPS (SPECULATER)

**J. W. Young, J. L., Mitchiner, K.E.F. Watt, and J. W. Brewer, Institute of Ecology, University of California, (USA)**

This paper presents a description of a large scale systems model, SPECULATER (for Simulation Program Examining the Causalities Underlying Land, Agriculture, Transportation, and Energy Relationships). Additionally, results of preliminary simulations are discussed along with their implications for global food and energy supply. Several factors will combine to make urban mass transit an increasingly important alternative to the automobile. First, mass transit becomes economically more viable when urban densities increase.

Second, national level decision makers may find energy efficient mass transit more attractive as our crude import situation deteriorates. Third, possible fuel price increases will make mass transit more attractive to the consumer. The greater use of mass transit will result in fuel savings which will decrease our crude import requirements.