Input/Output Modeling Tool for Decision Making

The Situation
According to a December 2005 US Census Bureau report, Idaho was the 3rd fastest growing state from 2004-2005. Prosperity of growth has not been shared equally throughout the state. From 2000-2005, 25% of Idaho’s counties experienced double digit growth while at the same time 23% of the counties lost population. Attraction of new businesses or the demise of existing businesses, resources, agriculture, and business policy and regulations all impact businesses, government and residents of a community. It is imperative that communities have the capability to assess the impact of changes, and resolve a complex set of job, tax and wage issues.

Our Response
Extension Educators in the Magic Valley recognized the need for a tool, specific to a region, that allows decision makers to examine “what/if” scenarios in the economy. The IMPLAN national database was modified with local industry data to calculate a regional Input/Output model for the Magic Valley. A spreadsheet interface was developed for the I/O model to permit Extension Educators to quickly model these “what/if” scenarios. Initially, the program was used by Idaho Extension to increase awareness of the agribusiness contribution to the local economy. The model was essential in estimating the impact of possible groundwater curtailment on the Magic Valley economy.

Program Outcomes
This model has been used by Extension Educators to look at various ways the economy and jobs may be affected by changes. In 2004, the model was used to show specifically how important irrigated agriculture is to the Magic Valley, and what could be expected by decreasing the amount of land irrigated through forced reduction such as water calls. A report was delivered to the Mid-Snake River Regional Commission to help guide them in the process of determining directions to take in shaping Idaho water issues. More recently, the model has been used to develop a report specific to the food processing industry in the Magic Valley as part of a larger study looking at the importance of agriculture. Extension has used this model mainly for agricultural issues, but other sectors of the economy may be studied as well. Future business location and attraction for new manufacturing, dairy expansion, or agribusinesses, will be needed.

The Future
Extension will continue to use this model to determine the effects of economic changes in the Magic Valley. Similar models have been developed for the Minidoka-Cassia county region and for Valley County, and can be developed for any region of Idaho.
For More Information
Steven L. Hines, Extension Educator
University of Idaho Extension—Lincoln County
115 West A St. Box 608
Shoshone, ID 83352
208-886-2406
Fax: 208-886-2407
Email: shines@uidaho.edu

Garth Taylor, Agricultural Extension Economist
Agricultural Economics and Rural Sociology
University of Idaho
PO Box 442334
Moscow, ID 83844-2334
208-885-7533
Fax: 208-885-5759
Email: gtaylor@uidaho.edu