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Using Regional Economic Analysis Tools to Address Land Use Planning Issues

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Using Regional Economic Analysis Tools to Address Land Use Planning Issues

Abstract

This article presents an example of how Extension economists and local Extension educators can use local economic information along with readily available data and tools to provide relevant factual information to help contextualize problems and evaluate alternative outcomes related to land use planning (especially land use planning focused on farmland preservation). The focus of this article is on how such information was developed, delivered, and used to help local policy makers and citizens make better informed decisions in a county with highly productive agriculture and heavy pressure from suburban and rural residential sprawl.

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Introduction

Idaho was the fifth fastest growing state in the nation from 1990 to 2000 (U.S. Bureau of Census). Many residents have concerns about negative impacts of this growth and the accompanying suburban and rural sprawl. In such situations, it makes sense for Extension professionals to respond to requests for land use planning help with objective information and non-controversial methods. An example of such an Extension response occurred in Canyon County, Idaho in the spring of 2002.

The Canyon County Idaho Situation

Canyon County is immediately adjacent to Ada County, a small county that mostly consists of the City of Boise. Boise was the seventh fastest growing metro area in the nation from 1990 to 2000 (U.S. Bureau of Census). Canyon County is a major participant in the Boise metro area growth, so it is experiencing a great deal of suburban and rural sprawl.

Canyon County is ranked second among Idaho counties in cash receipts from agriculture (\$311 million in 1997) (U. S. Department of Agriculture). Some of the best farmland in Canyon County is turning into subdivisions and small acreage sites for "trophy homes." Many farmers in the county are finding it difficult to continue to farm because their farming operations create problems (dust, noise, odors, spray drift) for their residential neighbors. Also, the traffic congestion on rural roads makes it difficult and expensive for farmers to move equipment and get their products to market.

Many Canyon County farmers feel that their operations should be protected from residential development incursions. Other farmers are equally concerned that, if they cannot develop their land as residential sites or sell it to developers, their rights to use their property as they choose are being unduly constrained. Opinions of non-farm residents of Canyon County are similarly

divergent. Rural zoning, transferable development rights, and "God given rights" for landowners to use their property as they see fit are "hot topics" in Canyon County.

Extension Response to the Situation

Into this emotionally charged environment stepped Extension. Following a request from the Canyon County Extension chair, Extension economists collected Canyon County data and analyzed it using economic input-output models. They found that every 100 acres of Canyon County irrigated farmland taken out of agricultural production results in annual reductions in total sales and total income in the county of about \$853,400 and \$137,200, respectively. About 70 jobs and \$204,000 in annual property, sales, and excise tax receipts would also be lost.

This and other information about the economic structure of Canyon County was reported back to local leaders. The report also pointed out the following:

Manufacturing is the second largest basic industry in Canyon County. Agriculture is the largest. However, nearly 40 percent of the county's employment in manufacturing is in high technology, which has grown rapidly in the recent past, and is likely to experience considerably more growth in the future. How this growth occurs is important to the future of Canyon County. If new manufacturing facilities and housing tracts locate on irrigated farmland, then this growth comes with economic trade-offs (sales, income, employment and taxes lost due to reductions in county agricultural production). The benefits of new manufacturing jobs would have to be weighed against these losses. On the other hand, if new manufacturing facilities and related employee housing tracts are located on land other than irrigated farmland (on "rocky hillsides"), then the county does not have these trade-offs, or at least they are potentially much less costly. This could be a "win-win" situation. The same is true with expansion of any other industries, services or retail trade (Peterson & Nelson, 2002).

The release of the report in Canyon County generated much discussion. As soon as the report was released, the authors had phone calls from local newspapers, and stories were run in the media throughout the region. Not everyone in Canyon County liked the report, but few, if any, questioned the information it contained. Many people in Canyon County had simply not thought about the trade-offs and the fact that there might be ways to have growth without sacrificing so much of the local agricultural economy.

Some examples of how the study is currently being used to facilitate well-informed land use policy decisions in Canyon County follow.

- Canyon County Farm Bureau is using the study to educate local leaders and citizens about the economic value of agriculture to the county.
- Extension faculty have made presentations to state legislators from Canyon County, to local Chambers of Commerce, and to local service clubs.
- Local and regional media have used the study in several news stories to inform the public about agriculture's role in the Canyon County economy.
- The Canyon County Board of Commissioners and the Canyon County Development Services Department are using information from the study during deliberations on giving out conditional use permits. They are trying to determine whether uses proposed in the permitting process will contribute to the erosion of the county's economy, or to its growth. Those land uses that are not as economically productive as agriculture will receive greater scrutiny before permits are given (if they are given).
- Information from the study is being used in the process of developing the county's comprehensive plan, to help determine which land should be zoned as agricultural, and the value of that land to the economy.
- Extension faculty in Canyon County have assisted county leaders and citizens with all of these educational efforts.

The study discussed here did not solve Canyon County's land use/farmland protection problem. County citizens and policy makers are still working on that. However, the study provided those citizens and policy makers with facts to help explain the problem and put it into a context to which they could better relate.

What Can Be Learned from the Canyon County Experience?

Land use issues that must be addressed by local policy makers are becoming increasingly common in places such as Idaho, where policy makers have always thought that, "Those are not problems we will ever have to deal with." Extension will get called on to help with these situations.

Two obvious ways Extension can help (and has helped) are:

- By providing group process skills and expertise to help citizens and leaders understand and

respect diverse opinions and viewpoints and search for the most widely acceptable solutions and

- By providing relevant factual information to help contextualize problems and evaluate alternative outcomes.

Extension professionals are helping with land use issues in Canyon County in both of these ways. The focus of this article is on how relevant factual information was developed, provided, received, and used.

Relevant factual information of the sort discussed in this article is easier to develop now than it was even a few years ago. Economic input-output models have been around for a long time. However, data and tools (software and hardware) to facilitate use of such models have "come a long way" in the last 10 years.

There are faculty and staff affiliated with most land-grant universities (often agricultural economists working in Extension) who have the expertise to develop models such as the Canyon County, Idaho model discussed here. Using IMPLAN (Minnesota IMPLAN Group) and existing databases, such models can often be developed fairly quickly (weeks rather than months). With back-up from specialists and with relatively little training, county Extension educators and other field Extension faculty can assist local policy makers and citizens to interpret and utilize results of these models. Thus local land use decisions can be made with the benefit of better information about their complete consequences.

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