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Title: GIS and Economic Development

First the article begins by defining the words Local Economic Development (LED), The International Economic Development Council (IEDC) defines economic development as “a program, group of policies, or activity that seeks to improve the economic well-being and quality of life for a community, by creating and/or retaining jobs that facilitate growth and provide a stable tax base” (International Economic Development Council 2008). The Purpose of the article was to examine the use of GIS for economic development. Spatial clustering concepts, spatial models, and related visualization techniques (GIS) can be applied to the case of economic development in rural environments. This article discusses methodological issues including data and analysis issues. Specifically, the article examines the use of GIS in five areas – economic impact analysis, spatial policymaking, identifying potential cluster regions, identifying critical social relationships, and web-based GIS.

For Economic Impact Analysis the advantages of using GIS in an impact study are many. As a database management tool, it facilitates data queries as well as mapping functions for displaying geographical information. The ability to convey data through maps to non-technical audiences is an obvious plus. Also the analytical capabilities of GIS, such as overlays and buffering, are valuable in the identification of the local area of economic impact. In case of Spatial Policymaking, a common application of economic impact analysis is in the creation of a comprehensive economic development strategy (CEDS). Its purpose is to provide a strategic plan for the project that identifies community participation, a plan of action, and a set of performance measures for project assessment. The specific investments that comprise the CEDS are then geocoded and placed within the CEDS area. If there are infrastructure needs associated with a project they are easily identified when the proposed project is integrated with existing city or county utilities. It is much easier for policymakers or the general public to see the proposed benefit if the information is present in a map and not long sections of text. Public buy-in can often be completed in a single session if the data are clearly organized and presented in maps. A second strategic example is the creation of enterprise zones or joint economic development districts (JEDS). These types of projects create an individual political jurisdiction with taxing authority. GIS is useful to identify land owners and business locations before the final spatial footprint is determined for the project. It is often politically beneficial to modify the area if known opposition is to be encountered. This saves a lot of time and can help eliminate prolonged and often messy public debate. GIS is also useful to identify land owners and business locations before the final spatial footprint is determined for the project, an example of this usage is that, it is not uncommon for communities to propose the creation of new development parks only to find later that they are located in a flood plain. GIS makes it easy to include topography and hydrology data into the plan.

Social relationships are a critical component of economic development. The chances that a region will be successful in its economic development efforts will be greatly enhanced when there are healthy relationships between members of the economic development community. Social scientists use the concept of social capital to understand social relationships. Social capital

can be approximated as “the stock of active connections among people: the trust, mutual understanding, and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible” (Cohen and Prusak 2001, p. 4). GIS if combined with social network analysis (SNA), can provide a methodology for describing and analyzing social relations. The mapping of individuals and relationships that exist between them can also be informative, mapping the relationships can provide critical insights into the geography of a cluster. Also, in the case of a region’s economic development endeavors, mapping relationships can provide insights into the extent of cross-jurisdictional collaboration. GIS is also useful in the examination of industrial clusters. One application is visualization of the geographic distribution of cluster members as well as the total industry. This information is meaningful because not all firms in a given industry will likely chose to participate in a cluster-based economic development initiative, at least initially. Mapping the evolution of the cluster will provide evidence of its development. Also the maps may provide the basis for analyses of the characteristics of people which impact their willingness to participate in a cluster. Such information may prove insights that will be useful in attracting more businesses to the cluster.

Lastly, one practical application of GIS in economic development is using Web GIS to provide data about the local community. As Bastian (2002) noted, economic development web sites are an efficient method by which site selectors can acquire information about potential locations. This can be achieved in two ways, either Full-fledged desktop GIS software can be augmented with server connections to centrally held data centers. Internet connectivity can be transparent to the user where the external data is viewed as ‘just another disk’ to the desktop. A second approach is to have the server provide all or most of the processing power in response to a request from a browser or lightweight browser-type application (Google Earth, Arc Explorer).

The reason why I chose this article is not only because I am interested application of GIS in Economic Development but also to see how we can Inco-operate traditional data and GIS data to help come up with easily understandable output and easily presentable output analysis for all the stack holders in economic development discipline. There are a lot of insightful information on this article but one that stood out to me was how your can use both location quotients and measures of spatial autocorrelation to delineate the spatial footprint of a cluster. This approach could be employed with various areal units, such as zip codes, census tracts, and labor markets, assuming the necessary data can be acquired. For the most part the