Spatial Distribution as a Factor in the Evaluation of Community Assets

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Nature and Significance of the Project

Community revitalization typically requires an initial evaluation of the community’s resources and assets. Many socio-economic conditions, development opportunities and cultural heritage assets are spatial in nature and distributed throughout a neighborhood. Their spatial distribution can in many cases enhance or decrease the value that can be gained from a particular asset. This research aims to develop a model for the role spatial distribution, interaction and overlap can play in the evaluation of a community’s assets in a multi-stakeholder environment. The introduction of geographic information systems (GIS) provides such a modeling effort an additional dimension for asset management decision-making by allowing residents to examine spatial factors using GIS maps. The study is particularly significant to community-based organizations and government agencies involved in community revitalization. In this study, the Sunnyslope neighborhood in Phoenix, Arizona was selected as a case study for the development of the model and related GIS maps.

Study

Using an online survey, multiple stakeholders in the Sunnyslope neighborhood identified specific economic, social and physical assets of the community. Several neighborhood maps were developed in GIS to gauge the effectiveness of GIS in modeling spatial impacts and overlaps of these assets. These intermediate GIS maps were used to facilitate better understanding among community members in perceiving the community’s assets. Currently three maps have been developed based on the feedback from these groups:

- A walking tour/business typology map of Sunnyslope’s Hatcher Road shopping/business district
- A map of the recreation areas/parks, bike routes and bus routes superimposed on a map of major businesses and districts in the community. This also shows the heath care district around the John C. Lincoln hospital. The heritage of Sunnyslope has a strong basis in the establishment of this hospital, representing both historical and institutional relevance.
- A map encompassing the block watch organizations, which were identified as an important social asset by the community.

The second and the third maps (above) are being further developed to include educational and other institutional assets mentioned by the stakeholders. At this point, “spatial overlap” has been the main tool used in trying to understand how different assets, whether they be physical, social, or economic, affect each other. More quantitative methods -- such as measuring the proximity of different assets to each other and comparing these to specific benchmarks such as acceptable walking distances -- have not been utilized yet, but this will constitute the next step in this study.

Future Directions

The study so far has mostly relied on the feedback received from a limited number of stakeholder groups. This will be further expanded to include other groups such as the educational institutions
and a variety of ethnic groups in this very diverse neighborhood. This will serve to further enhance the data set necessary for the modeling effort. On the GIS modeling side, analytical tools will be deployed to further study the role spatial factors play in a community’s perception of its assets. Thematic layers will be built in GIS to analyze the overlap of the perceptions of community groups regarding the effect of spatial factors such as proximity, overlap and distance on the perceived value of a community asset. The GIS model may serve to clarify or reconcile a multitude of perceptions regarding a community’s assets.

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1The project assistant was Aparna Thatte, a doctoral student in Environmental Design and Planning. She can be contacted at: Aparna.thatte@asu.edu

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