# Measuring Nonprofit Performance and Social Need: The Application of Geographic Information Systems Technology

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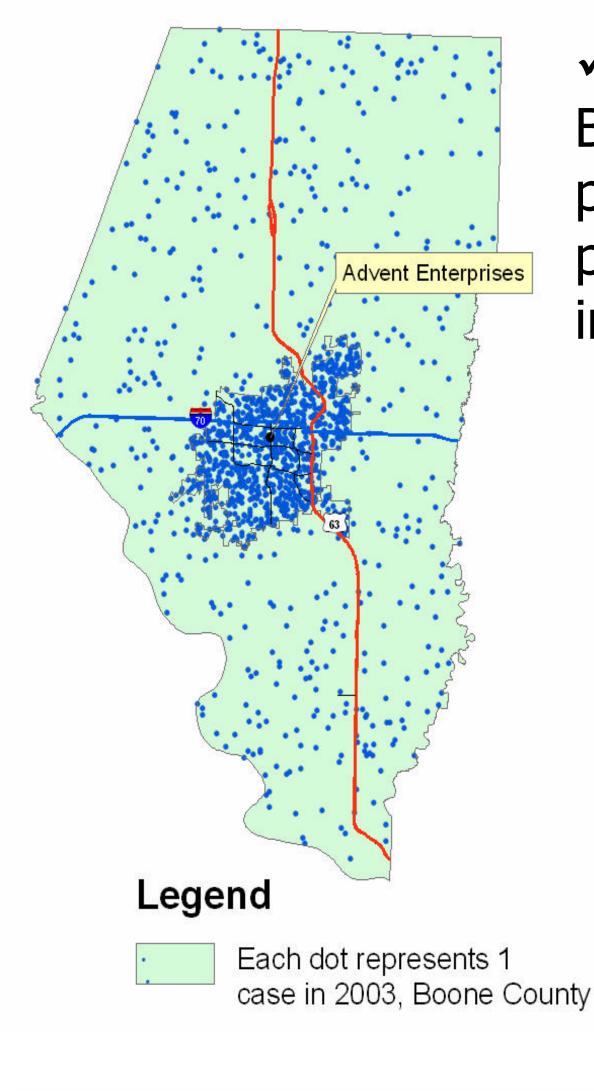
## **Project Abstract**

On a yearly basis, the Boone County Community Services Advisory Commission and the Office of Community Services in Columbia, Missouri, invite local nonprofit organizations to apply for potential funding assistance. In return, the City of Columbia and Boone County require nonprofit organizations receiving funds to participate in an evaluation of selected program Annually, about five to seven outcomes. entities undergo nonprofit an external evaluation of programs benefiting from funding assistance. In an era of greater accountability expectations, both government and nonprofit agencies need a better understanding of how monetary resources are converted to program services, in order to improve their decision making.

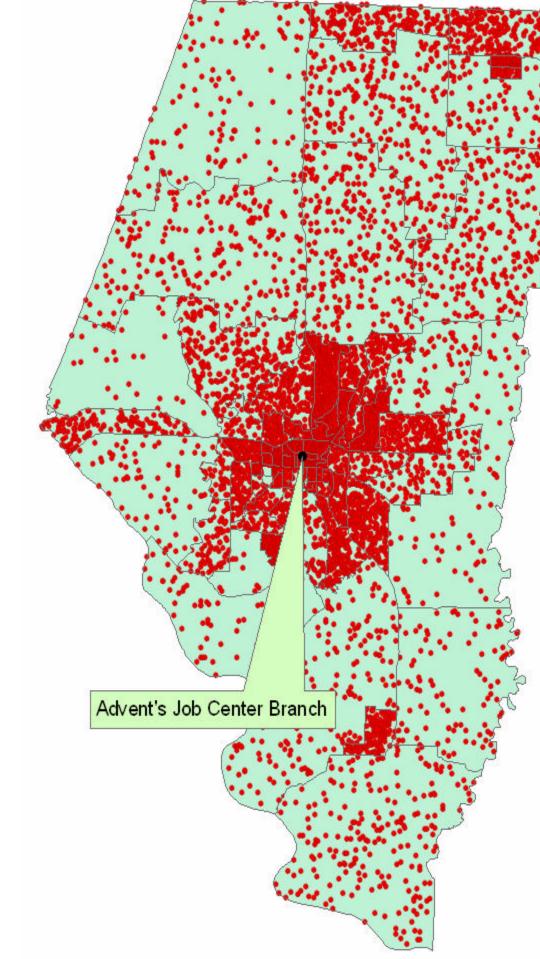
In late fall of 2003, the Harry S Truman School of Public Affairs at the University of Missouri, Columbia and the Office of Community Services entered into an agreement to evaluate the nonprofit nine outcomes of program organizations. Since the scheduled evaluation of selected nonprofits had not taken place in 2003, those agencies in addition to the scheduled 2004 nonprofit roster were combined for the current evaluation study. Thus, the following agencies were included in the evaluation: Advent Enterprises (Job Branch Center), Family Counseling Center, Mid-Missouri Legal Services, Phoenix Programs, Rainbow House, Big Brothers, Big Sisters of Central Missouri, Boys and Girls Club, Columbia Public Schools Project CRIB, and Community Playground (Fun City). In all, nine agencies and 18 programs were included in the study.

## **Geographic Information Systems**

Selected program output measures were collected from each agency to be analyzed using geographic information systems technology, or GIS. As GIS technology has grown, it is now possible to examine agency program accomplishments within geographic boundaries, using U.S. Census Bureau data, state agency data, and information derived from previous evaluation studies. Examples of two nonprofit agencies follow.



✓ Advent Enterprises Job Center Branch served 16.3% of the potential employment needs of previously incarcerated individuals in Boone County.



✓ Advent Enterprises Job Center Branch served 1.2% of those persons over 25 years of age with less than a high school education

### Legend

(0-200 cases per square mile)

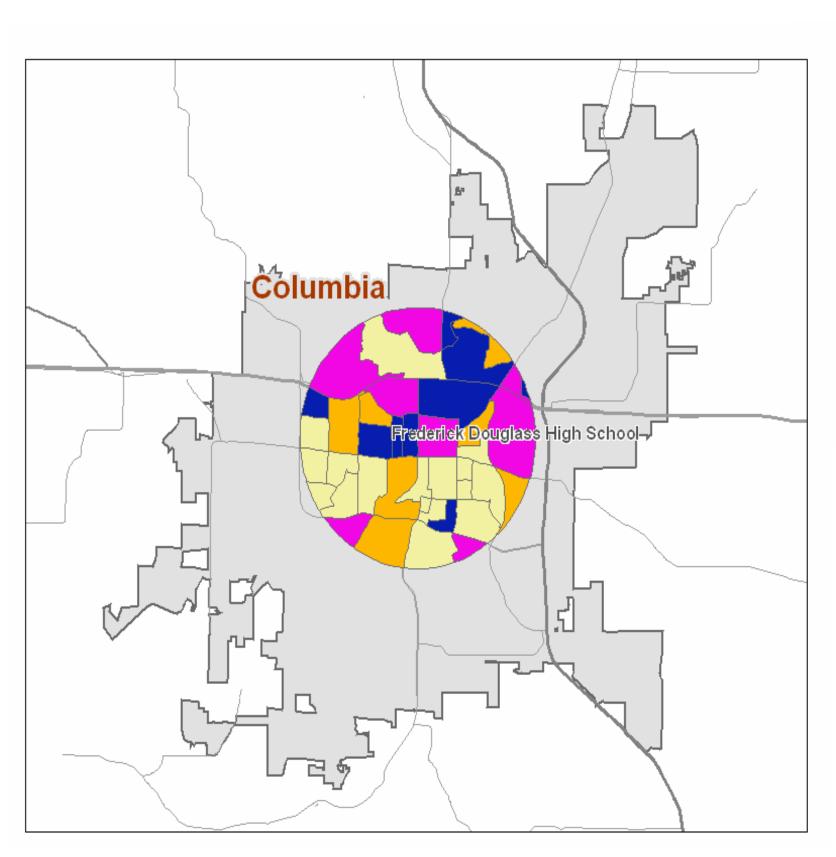
Medium Density (201 - 700 cases per square mile)

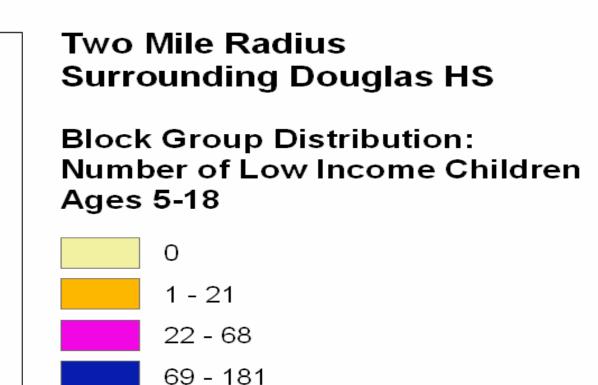
High Density (701 - 1328 cases per square mile)

Data Source: U.S. Bureau of the Census, 2000

## **GIS Spatial Analysis**

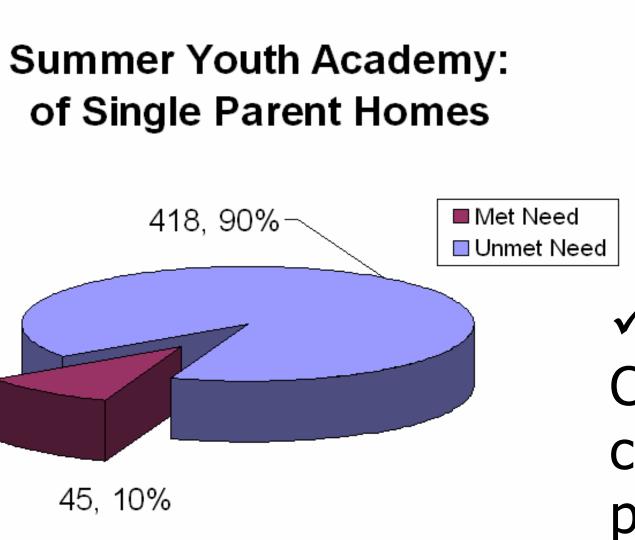
GIS data and nonprofit output measures were used in combination to generate maps indicating areas and the type and degree of need served by an agency. As indicated by the spatial analysis, pockets of poverty do exist even within a relatively wealthy community, and a variety of social needs are quite apparent.





✓ Community Playground (Fun City) served 6% of low-income children ages 5 to 18 within a two-mile radius comprising their service area

#### Summer Youth Academy: 5-18



1,428, 94% — Met Need UnMet Need 99, 6%

✓ Community Playground (Fun City) served 10% of low- income children ages 5 to 18 from single parent households within a two-mile radius

## **Next Steps**

- Continued use of GIS technology and expansion to identify trends and establish benchmarks
- Encourage nonprofits to examine each other's evaluation findings and illuminate commonalities, thus serving to promote future collaborations or partnerships



