The Impact of the Little Miami Scenic Trail on

Single Family Residential Property Values

A thesis submitted to the
Division of Research and Advanced Studies
of the University of Cincinnati
in partial fulfillment of the
requirements for the degree of

Master of Community Planning

in School of Planning
of College of Design, Art, Architecture, and Planning

2008

by

Duygu Karadeniz

Bachelor of City Planning, Izmir Institute of Technology, 2003

Committee Chair: Rainer vom Hofe, Ph.D.
Faculty Member: Kiril Stanilov, Ph.D.
Reader: Don Burrell, AICP, Bicycle/Pedestrian Coordinator, OKI
ABSTRACT

Across the United States, many conversions of abandoned railroad rights-of-ways into trails have faced opposition from surrounding property owners. Much of the opposition derives from the fear that developing trails would cause a decrease in property values because of loss of privacy, increase in noise, traffic, litter and crime.

The objective of this study is to assess the impact of the Little Miami Scenic Trail on property values. To accomplish this task, the hedonic pricing technique was employed to measure the impact of the trail on single-family residential property values in southwest Ohio. Several of the variables used in this model were measured using Geographic Information Systems (GIS) software.

The analysis suggests that, each foot increase in distance to the trail decreases the sale price of a sample property by $7.05. In other words, being closer to the Little Miami Scenic Trail adds value to the single family residential properties.
CHAPTER I
INTRODUCTION

Trails have the ability to improve many aspects of our lives, including recreation health, and fitness. People who walk, jog, skate or cycle on trails reap health/fitness benefits such as a lower risk of heart disease (Lindsey 2004). Moreover, by improving their health through exercise, trail users may enjoy another benefit - lower medical bills.

Trails may also provide transportation, environmental and visual/aesthetic benefits. If carefully planned, trails increase the number of people biking or walking to work and other destinations, decreasing traffic and air pollution (Lindsey 2004). Furthermore, the vegetation that grows along trails can serve as a wildlife corridor, facilitating the movement of animals (Hellmund and Smith 2006). This vegetation may also help to filter out pollutants coming from adjacent roadways, and provides visual/aesthetic benefits to nearby properties.

In some cases, trails may help to preserve local history and promote community pride. For example, rail-trails, or trails that are built within the right-of-way of an existing or former railroad, often provide access to historic features such as buildings, factories and bridges (Hellmund and Smith 2006). In this way, rail-trails help to protect the historic roots of communities. Trails may also serve as a social meeting place for local residents. On a regional level, trails offer connectivity between neighborhoods, thus promoting social interaction.

Last but not least, trails may provide economic benefits. Trail development may spur tourism, creating opportunities for economic development (bike rental shops,
restaurants, etc.) along the trail (Lindsey 2004). This development may also encourage people to relocate to the community. Eventually, property values may rise as demand increases for real estate with access to the trail.

Although their benefits are widely recognized, trails are sometimes regarded as an inefficient use of public funds because of development and maintenance costs (Crompton 2001). Thus, to justify future investments into trails, it is necessary to quantify their economic benefits. Positive valuation of trails may encourage local governments to develop and maintain new trails. For example, Frederick Law Olmsted justified Central Park in New York City with the future increases in property values and property tax revenues he claimed would occur after the park was developed (Crompton 2001).

Another perceived drawback to trails is that they decrease property values due to a loss of privacy, and an increase in crime, traffic and noise. For example, the Little Miami Scenic Trail in southwest Ohio was opposed by property owners from The Village of Terrace Park on the grounds that it would lower property values (Edwards 1999).

**Research Objective and Questions**

The objective of this study is to assess the influence of the Little Miami Scenic Trail on property values in southwest Ohio. To accomplish this task, the hedonic price technique will be employed to measure the impact of the trail on single-family residential property values in Hamilton County and Clermont County. The study seeks to answer the following related questions:

1. Does proximity to the Little Miami Scenic Trail affect the sale price of single-family properties in Hamilton County and Clermont County?

2. If yes, what is the estimated impact (in dollars) of the trail on these properties?
made to ensure that this is the case, it should be recognized that the data comes from two different sources, and thus may be subject to error. In addition, land use information might have changed during the three years upon which the analysis is based. Park locations were verified during surveys of the Little Miami Scenic Trail; however, it was not possible to check that land uses across the entire study area were correctly coded.

Two additional assumptions made for this study are related to spatial autocorrelation and heterogeneity. Spatial autocorrelation refers to a condition where the sale price of a given property is influenced by neighboring sale prices. Heterogeneity exists when property characteristics such as house size vary from location to location. In other words, house with similar characteristics are likely to be located next to one another. If present in the data, spatial autocorrelation and heterogeneity may lead to incorrect results. Future studies should investigate and remedy any spatial autocorrelation and heterogeneity that might be found in the data.

**Conclusion**

This study examined how the Little Miami Scenic Trail affects the sale prices of single-family residential properties in Hamilton County and Clermont County, Ohio. Using structural, neighborhood and environmental variables, a hedonic price model was developed for 376 properties located within one mile of the trail. This model demonstrated that proximity to the trail positively impacts property values. Specifically, the model results suggested that for every foot closer to the Little Miami Scenic Trail a single-family residential property is located, its sale price increases by $7.05. This finding is notable because rail-trails such as the Little Miami Scenic Trail are often criticized for having a negative impact on property values. This study suggests, to the
contrary, that rail-trails can have a positive effect on the economic well-being of the surrounding community.