

Neighborhood Parks and Residential Property Values in Greenville, South Carolina

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January 2001

This research was funded in part by a grant from the Center for Applied Real Estate Education and Research at the University of South Carolina.

Abstract

The effect of proximity to different types of parks on housing prices is estimated using a unique data set of single family homes sold between 1990 and 1999 in Greenville, South Carolina. The value of park proximity is found to vary with respect to park size and amenities. The greatest impact on housing values was found with proximity to small neighborhood parks, with property values as much as thirteen percent higher for homes between 300 and 500 feet and six and a half percent higher for homes between 500 and 1500 feet of such parks. The positive impact of proximity to attractive medium size parks also extended to homes as far as 1500 feet from the park.

Introduction

Urban sprawl has been blamed for loss of wildlife habitat, farmland, and wetlands. Many states have been increasing their efforts to protect remaining open space. In November 2000, voters across the country considered at least 205 ballot measures that proposed raising funds to conserve open spaces (Barber 2000) and eighty-two percent of these measures were approved raising more than \$7.3 billion.

According to a recent Sierra Club report (1999), South Carolina lags behind the rest of the nation in terms of open space protection, ranking third to last among the fifty states. In funding for parks and recreation, Greenville County households provide at least thirty percent less than the state's other metropolitan areas, Spartanburg, Richland, and Charleston counties (Romain 2000). City planners, however, have displayed increased focus on protection of the Reedy River, downtown revitalization, and improving the quality of life for Greenville residents.

What is the provision and maintenance of parks worth to a community? Parks can provide recreational opportunities and attractive views for nearby residents but they might also lead to increased traffic and noise. This study estimates the net impact of proximity to parks and park type on residential property values in Greenville, South Carolina. The value of parks reflected in residential property values would provide a lower bound on the overall value of parks and open space protection to residents. Quantification of the impact of open space protection on residential property values could help guide local and state land use decision-makers in preservation efforts and planning for future growth.

Neighborhood Parks in Greenville, South Carolina

This study analyzed all sales of single family houses in the city of Greenville between 1990 and 1999, with a total of 4153 sales included in the final analysis. In addition to park proximity, other factors taken into account are the age and quality of the house, the number of bedrooms and bathrooms, square footage of the house, lot size, whether or not the house had air conditioning, and whether or not the house had a garage. General neighborhood differences are taken into account using census tract data.

Parks are categorized into four groups: small basic, small aesthetic, medium basic, and medium aesthetic. There are twelve parks, ranging in size from 15,620 to 87,687 square feet, that are group together as small basic neighborhood parks (Type 1). All of these parks have some playground equipment in a sandy area and a small grassy area, typically mottled with weeds and bare spots. None of these parks could be considered particularly attractive, but they appear generally maintained. Four other small parks, ranging in size from 17,541 to 69,921 square feet, are grouped together as generally attractive as well as having some playground equipment and a well kept grassy area (Type 2). Six medium size parks, ranging in size from 210, 635 to 1,101,310 square feet, are grouped together (Type 3). These parks vary in terms of the type of amenities available, including baseball fields, tennis courts, a frisbee golf course, and playgrounds, but all included some walking trails and more natural areas. Finally two other medium size parks (95,425 and 169,751 square feet) were group together as being generally less attractive with fewer amenities and no natural area (Type 4).¹

¹ It should be noted that Cleveland Park and Reedy River Park are not included in this analysis. Initial analysis did not indicate any consistent statistically significant impact of proximity to these houses on property values. This may

The Value of Park Proximity

First the general impact of park proximity was estimated without regard to park size or type. These initial results indicated that proximity to parks has a positive impact on housing values, with homes located within 1500 feet of any park selling for 6.5 percent more than homes greater than 1500 feet from a park. This impact appears most significant for small neighborhood parks, with homes within 1500 feet selling for 8.5 percent more than those further away.

Next, various zones equidistance from the park boundary around parks in each category were analyzed to determine if and where park proximity had a negative impact on housing price, for example where the negative impact of noise or lights of being adjacent to a park outweigh the positive value of easy access. Then various distance zones were analyzed to determine for each park type the distance at which there was no longer any significant positive or negative impact related to park proximity. Finally, various ranges between these inner and outer bounds of significance were tested to determine ranges within which there was not a statistically significant variation in the impact of the park proximity. These results are shown in Table 1. Note that the distance categories are not mutually exclusive as some houses were, for example, within 1500 feet of one park and within 500 feet of another. In addition, some ranges weren't statistically significant but were included for comparability to other park types.

Table 2 shows the estimation results using each of these proximity measures in terms of the percentage impact of park proximity on homes' sales prices. The estimates indicate a negative impact of park proximity for houses within 300 feet of the small basic neighborhood parks, reducing property values by about 14 percent. On the other hand, there is a significant positive impact on housing prices for homes between 300 and 500 feet of about 15 percent. Further, there is a significant positive, though smaller, impact on housing values for homes between 500 and 1500 feet from a small basic park, equal to about 6.5 percent higher housing values.

There is also a significant positive impact of proximity to small attractive parks (Type 2) for homes within 600 feet, but no significant impact beyond that. Homes within 600 feet of Type 2 parks sold for almost 11 percent more than equivalent homes further from such a park. For the attractive medium size parks, there was no statically significant impact on houses within 200 feet but a positive impact on homes between 200 and 1500 feet, raising values by about 6 percent. Finally, Type 4 parks were estimated to have a significant negative impact on home values for homes within 600 feet, reducing housing sales values by just over 50 percent, but no statistically significant impact (positive or negative) beyond that.

Demographic information obtained from census tract data could help determine the relationship between demographic characteristics and the purchase of housing near parks. For example, analysis of 1997 U.S. Census data indicates that the median household income for homes located within 1500 feet of the small basic parks is more than twenty percent lower than the rest of Greenville (\$26,500 versus \$34,000). This suggests that city expenditures on small neighborhood parks benefits lower income households relatively more than the average household.

be due in part to the regional nature of these parks, with Cleveland Park being home to the Greenville Zoo and Reedy River Park adjacent to the downtown. This study focuses on what might be considered neighborhood parks for better comparable analysis across parks.

Conclusions

The results of this study indicate that park proximity generally has a positive impact on residential housing values in Greenville, suggesting that people are willing to pay more to live close to parks. It is possible that acquisition of land for new parks, particular in the growing suburbs surrounding Greenville, and the maintenance of existing parks could be partially financed by higher property tax revenues that would result from increased home sales prices. Estimates of the impact of parks on home sales values could be valuable information to local parks and recreation departments attempting to justify current expenditures on land acquisition in rapidly growing areas. Such information could also be useful to developers deciding whether or not to include parks or other open space in new subdivisions, or to land use planners attempting to implement open space requirements for newly developed areas. Further analysis will focus on demographics and comparison across upstate cities and towns to determine how demographic characteristics, city size, and proximity to other types of open space (e.g. farm land or state forests) affect valuation of neighborhood parks.

References:

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Table 1: Park Proximity Measures by Park Type

Park Type	Proximity	Number of Houses in Range
Type 1: Small Basic	Within 300 feet	26
	300-500 feet	70
	500-1500 feet	434
Type 2: Small Attractive	Within 600 feet	80
	600-1500 feet	289
Type 3: Medium Attractive	Within 200 feet	28
	200-1500 feet	289
Type 4: Medium Basic	Within 600 feet	5
	600-1200 feet	79

Table 2: Impact of Park Proximity on Residential Housing Values

Park Type	Proximity	Percentage Impact on Housing Sales Price
Type 1: Small Basic	Within 300 feet	-14
	300-500 feet	15
	500-1500 feet	6.5
Type 2: Small Attractive	Within 600 feet	11
	600-1500 feet	0
Type 3: Medium Attractive	Within 200 feet	0
	200-1500 feet	6
Type 4: Medium Basic	Within 600 feet	-51
	600-1200 feet	0