Landscape Quality and the Price of Single Family Houses: Further Evidence from Home Sales in Greenville, South Carolina[1]

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Abstract

In this study, the contribution of the quality of landscaping to house prices was estimated for a sample of 218 home sales in Greenville, SC, from 1996 to 1997. The estimates were made using regressions of house price on house characteristics, location and landscape quality. The results obtained in this research were similar to an earlier study of Greenville home sales, from 1991 to 1993. For homes with the same square footage and other house characteristics, selling prices were 6% to 7% higher if landscaping quality was judged excellent rather than good. The price premium obtained by upgrading landscaping from average to good was approximately 4% to 5%.

Index words: landscape quality, home prices, hedonic model.

Significance to the Nursery Industry

Landscaping services and the associated purchases of turf, plants, shrubs and trees provide new or existing homes with aesthetic surroundings, buffers from noise and nuisances, and climate control through shade and windbreaks. While these functions may have an economic value, the market does not value these landscaping benefits directly. The market capitalizes these benefits into the price people are willing to pay for homes with superior landscaping characteristics. Like many home improvements, e.g., central air conditioning, the value of superior landscaping is likely to be recovered, at least in part, through added sales price when the house is sold. Unfortunately, there are few guidelines available to homeowners on the return in sales price that they might expect from added investments in landscaping. The lack of information on the value of landscaping to homeowners may result in either under or over investment in landscaping services. Without information on expected returns from better landscaping, households may be less likely to undertake landscaping investments. In this study, evidence is presented that a hedonic model of housing prices yields reliable estimates of what a homeowner can expect in terms of a higher home sales price from improvements in the quality of the home's landscaping.

Introduction

Studies that use statistical controls for house characteristics have found that trees on residential lots improve home sales prices (2, 9). However, these studies did not include other landscape characteristics that may affect the price of a house. Consequently, the value that is attributed to trees may, in fact, include the contribution of plants, grasses, and other landscape features to house prices. In an earlier study of home sales in Greenville, benefits of superior landscaping were found to be substantial (5). Investing in landscaping that transformed a lot from a 'good' rating by a local landscaping expert to an 'excellent' rating added about 5% to the sales price of homes in the Greenville sample (5). In general, the allowance of 2 to 4% of the home construction cost for general landscaping of the lot seems to be recovered in the future home sales price. The goal of the research described in this study is to provide additional evidence on the returns that homeowners can expect from investments in landscaping activities.

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Materials and Methods

The market for single family homes is an example of the market for a heterogeneous good (3). Rosen (11) developed the hedonic economic model to isolate the contribution that individual characteristics of a heterogeneous good make to market price. In this study, the first stage of a hedonic model of the market for single family homes is estimated. The focal point of the model is the estimation of the contribution that landscaping makes to the price of homes. In hedonic models of housing markets, the price of the home is regressed on a vector of house characteristics and location attributes. One of the characteristics in this study is the quality of the landscaping on residential lots. In the regression, neighborhood characteristics and the influence of house characteristics (square footage of the house, the presence of central air conditioning, etc.), on house price are held constant while evaluating the effect that improved quality of the landscape has on house price.

Before discussing the regression model and results, it is important to note that the data used for the analysis are confined to a single, medium size city, Greenville, SC. Thus, the inferences drawn are valid only for the local housing market analyzed. Replication of the earlier (5) analysis may reveal variation in parameter estimates that reflect the alternative data sets and model structure used. However, the model structure is very similar to the earlier study to facilitate comparison of the results for the two time periods, 1991–93 and 1996–97. Two types of data were used in this analysis—house characteristics and landscape quality.

Housing data. Housing characteristics were obtained for the 218 single-family homes sold from July 1996 to June 1997 in the City of Greenville, SC. The data source was the Multiple Listing Service (MLS) Comparable Book for each quarter during this time period. The earlier study (5) used

Table 1. Selected housing characteristics, City of Greenville, SC.[z]

Variable	1991–1993 Mean	1991–1993 Standard deviation	1996–1997 Mean	1996–1997 Standard deviation
Selling price, $	98,974	40,453	122,138	100,845
House size, sq ft	2,408	920	1,745	893
Lot size, sq feet	15,515	7,106	13,089	7,853
Days on the market	na	na	87	117
Percent with				
4 or 5 bedrooms	14.9		17.0	
Garage	25.3		53.2	
Central air	38.0		52.3	
Sample size	288		218	

[z]Sources: 1991–93, Office of Tax Assessor, Greenville County, SC, and 1996–97, Multiple Listing Service (MLS).

data on 288 home sales from 1991–1993 obtained from the Greenville County Tax Assessor (GTA) (1). The MLS and GTA data are very similar in the reporting of housing characteristics—e.g., square footage, type of heating and air conditioning. Where they differ, and where the MLS data may be more useful, is in the accounting for 'days on the market.' Generally, one would expect a negative relationship between days on the market and market price. The current study allows us to examine possible omitted variable bias in the earlier study. A partial listing of the housing characteristics and their statistical properties is presented in Table 1.

The mean house price was $122,138 in 1996–97—about 23% higher than five years earlier. The homes sold in 1996–97 tended to be older, three bedroom homes on quarter acre lots. The houses sold in 1996–97 were smaller, on average, than in the 1991–93 study and the variance in sales price around the mean price was higher. In effect, the current sample of homes has a wider range of low and high priced homes than the earlier sample.

Landscape data. The second source of data for the analyses was an on-site survey evaluation of the characteristics of the landscape for each of the homes sold during this period. A landscape design and real estate professional carried out the on-site surveys of the 218 homes. The surveys were undertaken in the same quarter as the home was sold to ensure a good match in time between when the sale was made and when the landscape was evaluated. In addition to detailed evaluation of landscape features, the general landscaping quality of adjacent lots and the general neighborhood were assessed during the site visit.

The quality of the landscaping was evaluated both from the point of view of the type, size, and condition of plants, trees, etc., and how they were placed on the lot. Thus, the admittedly subjective concepts of balance, symmetry, sense of proportion and unity entered into the evaluations.[3] In 1996–97, most of the landscapes were judged to be good (27%) or average (36%). About 15% were excellent and 22% were poorly landscaped.

Location attributes also influence home prices as noted earlier (Table 2). Three location attributes are considered: traffic density, quality of neighborhood landscaping, and adjacent lot landscaping quality. Some non-landscaping features were held constant in the analysis by choice of the sample units. Thus, variation in home sale prices that may occur because of differential zoning across lots and differential tax rates was eliminated by restricting the sample to single family homes in the same tax district (City of Greenville).

[3]The landscape survey instrument was designed with the advice of faculty in the Department of Horticulture, Clemson University and a landscape professional in Greenville, SC. Thirty individual features were rated for each lot. Full results are available on request from the author.

Table 2. Neighborhood characteristics for the sample home in Greenville, SC.[z]

	Percentage of homes in the sample 1996–97	Percentage of homes in the sample 1991–93
Road traffic		
1—Light	68.7	64.3
2—Medium	16.6	19.6
3—Heavy	14.7	16.2
Neighborhood landscaping quality		
1—Excellent	14.4	6.3
2—Good	47.9	64.3
3—Average	26.0	28.7
4—Poor	11.6	0.7
Adjacent home landscaping		
1—Excellent	22.5	19.2
2—Good	46.8	50.4
3—Average	20.2	26.1
4—Poor	10.6	4.3

[z]Source: On site surveys of lot and neighborhood characteristics for homes sold in Greenville, SC, 1996–97 and 1991–1993.

Given these measures of landscaping quality, neighborhood characteristics, and house attributes, it is possible to isolate the influence that higher quality landscaping had on home prices. In the next section, the regression model used to test for the influence of better quality landscaping on home prices is presented and empirical results are discussed.

Results and Discussion

The regression model estimated is:

(1) Lprice = 1 + b2 LOGSQFT + b3 LOGSIZE + b4 EXCSIZE + b5 GOODSIZE + b6 AVGSIZE + b7 HVYTRF + b8 GARAGE + b9 AIR + b10 AEXCEL + b11 LOGDAYS + e

Where,

Lprice = the natural log of the selling price,
b1 = the intercept in the regression,
bi = the remaining regression coefficients—i = 2, ... , 11,
LOGSQFT = the natural log of the living area of the house in square ft,
LOGSIZE = the natural log of the lot size in square feet,
EXCSIZE = the interaction term between lot size and Excellent landscaping. The interaction term is formed by multiplying the LOGSIZE variable times a dummy variable equal to 1 for lots with Excellent landscaping and equal to zero for others.
GOODSIZE = the interaction term between lot size and Good landscaping. The interaction term is formed by multiplying the LOGSIZE variable times a dummy variable equal to 1 for lots with Good landscaping and equal to zero for others.

Table 3. Regression results for equation (1). Dependent variable in the regression is the log of sales price (Lprice).

Analysis of Variance

Source	DF	Sum of squares	Mean square	F-Value	Prob > F
Model	10	81.09470	8.10947	61.083	0.0001
Error	203	26.95057	0.13276		
C Total	213	108.04526			

Root MSE	0.36436	R-square	0.7506
Dep Mean	11.45350	Adj R-sq	0.7383
C.V.	3.18125		

(1) Variable	Regression parameter	(2) Parameter estimate	(3) Standard error	(4) T for H0: parameter = 0	(5) Prob > |T|	(6) Variance inflation
INTERCEP	b1	1.7406	0.6428	2.708	0.0074	0.0000
LOGSQFT	b2	1.1466	0.0749	15.290	0.0001	1.6756
LOGSIZE	b3	0.1270	0.0596	2.129	0.0345	1.3226
EXCSIZE	b4	0.0313	0.0095	3.271	0.0013	1.6230
GOODSIZE	b5	0.0251	0.0078	3.219	0.0015	1.7536
AVGSIZE	b6	0.0206	0.0073	2.811	0.0054	1.7485
HVYTRF	b7	0.0741	0.0754	0.984	0.3264	1.1658
GARAGE	b8	0.0419	0.0539	0.777	0.4383	1.1663
AIR1	b9	0.1877	0.0513	3.655	0.0003	1.0626
AEXCEL	b10	0.1912	0.0676	2.827	0.0052	1.3025
LOGDAYS	b11	–0.0721	0.0187	–3.858	0.0002	1.0794

AVGSIZE = the interaction term between lot size and Average landscaping. The interaction term is formed by multiplying the LOGSIZE variable times a dummy variable equal to 1 for lots with Average landscaping and equal to zero for others.

HVYTRF = a dummy variable equal to 1 for homes located near heavily traveled roads and equal to 0 for others.

GARAGE = a dummy variable equal to 1 for homes with a garage and equal to 0 for others,

AIR = a dummy variable equal to 1 for houses with central air conditioning and equal to 0 for houses without central air,

AEXCEL = a dummy variable equal to 1 for homes that have excellent landscaping on lots adjacent to their own and equal to 0 for others. This is a proxy for 'neighborhood effects.'

LOGDAYS = the number of days the home was on the market prior to sale,

e = the random disturbance term.

The results of the ordinary least squares regression of Equation (1) are presented in Table 3.

The regression was useful in understanding why house prices vary in Greenville as indicated by the R-SQUARE and the coefficient of variation(CV). About 75% of the variation in sales prices for the homes around the sample mean was explained by the variables included in the regression (the R-SQUARE is about .75). Moreover, the regression was accurate in estimating sales price. The average error in predicting the log of sales price was about 3.2% of the mean log sales price—a very good absolute fit of the predicted values with known observations (the coefficient of variation, CV, is 3.18). Both of these 'goodness of fit' measures indicated that the explanatory variables in the regression were useful in understanding home sales prices in Greenville. The F-Value of 61.083 indicates a clear rejection of the null hypothesis that the ten parameters (b2 thru b11) are equal to zero. Thus, the ten explanatory variables in the model (LOGSQFT thru LOGDAYS) did affect the sales price of homes in Greenville.

An important concern in regression is possible collinearity between the explanatory variables. If explanatory variables are collinear, the assumption that 'all else is the same' when interpreting the individual regression parameters is not valid.[4] This would make it difficult to estimate the effect that a single variable, like LOGSQFT, has on sales price. Note that Column (6) in Table 3 is the 'variance inflation factor' or VIF and is useful in identifying explanatory variables that are collinear. Generally, the regression should have VIFs less than two (4). The model reported in Table 3 meets these criteria easily. So interpreting the individual regression parameters in Table 3 in terms of their effect on sales price should not be a problem.

Next, the contributions of two major groups of individual house characteristics to home prices are considered—house/location characteristics and landscape quality.

House/location characteristics—influences on sales price. The regression coefficients (the bi) are consistent with expectations (Table 4, column 3) and other recent studies of the housing market (e.g., 3, 5, 10). Increasing the living area of the house and the size of the lot both increased the price of the house. Since these are continuous variables, the b2 and b3 coefficients may be interpreted as elasticities showing the percentage change in expected house price from a given percentage change in square footage of the house or lot size. For example, a 10% increase in the square footage of the

[4]The PROC REG in SAS (12) was used to estimate Equation (1). The VIF for a independent variable, Xi is: VIFi = 1 / (1-Rsquare i) where, Rsquare i is obtained from the regression of Xi on all remaining independent variables, Xj.

Table 4. Returns to improved landscaping for homes with similar attributes and excellent landscaping on adjacent lots, 1996–97 Greenville, SC.[z]

Lot size in sq. ft.	Expected sales price			Landscaping premiums			
				Good/avg		Exc/good	
	Avg lots	Good lots	Exc lots	$	%	$	%
10,000	$120,633	$125,794	$133,111	5,162	4.3	7,316	5.8
20,000	$133,639	$139,797	$148,559	6,158	4.6	8,762	6.3
30,000	$141,888	$148,700	$158,413	6,812	4.8	9,713	6.5
40,000	$148,048	$155,359	$165,800	7,311	4.9	10,441	6.7
50,000	$153,009	$160,728	$171,765	7,719	5.0	11,037	6.9
59,600	$157,031	$165,085	$176,611	8,054	5.1	11,526	7.0

[z]Calculated by the author using regression results in Table 3 and the following characteristics: Central Air, Garage, mean square footage in home, not located on a heavily traveled road, with excellent adjacent lot landscaping, and mean days on the market.

house is expected to increase the house price by about 11.4%. There is a roughly proportional relationship between square footage of the house and expected sales price.

The lot size parameter, b3, is also an elasticity. A 10 percent increase in lot size increases the expected sales price by about 1.3%—very close to the 1.5 % estimated elasticity in the earlier study (5). The elasticity of sales price (b11) with respect to added number of days on the market is –0.072. A 10 % increase in the number of days in the market was associated with a 0.7% decline in expected sales price. The statistically significant parameter for days on the market suggests that a key variable was omitted from the earlier analysis.

Column (5) In Table 3, contains the ‘p’ values for the ‘t’ tests for the statistical significance of the regression parameters, bi. The three parameters, b2, b3 and b11 are each different from zero at commonly accepted value of significance (e.g., $\alpha = 0.05$).

The remaining regression coefficients on non-landscape variables reflect the effect of dummy variables on the log of the house price.[5] Each of the coefficients has the expected sign except HVYTRF which is not different from zero—i.e., has no significant effect on the home prices. Expected sales prices are higher for homes with central air conditioning while traffic and garage were not significant contributors to sales price. The surprisingly weak statistical showing by the Garage and Road-heavy dummy variables was also apparent in the earlier study (5). Holding all other house characteristics constant, neither of these variables would be judged to have an influence on house prices that is statistically different from zero.

Landscaping influences on sales price. The two ways in which landscaping is likely to affect the sales price of a house are the quality of landscaping in the neighborhood/lots adjacent to the house in question, and the quality of landscaping on the lot itself. It is expected that the size of the lot will interact with the quality of landscaping to affect house price. Excellent landscaping on one-acre lots would require more of an investment than similar landscaping on quarter acre lots. The benefits of these investments are capitalized into the selling price of the house under the hedonic model hypothesis.

To test for the neighborhood/adjacent lot landscaping impacts on sales price, simple dummy variables were formed (Equation (1)). The b10 regression coefficient on the quality of landscaping on adjacent lots, AEXCEL, indicates that houses in neighborhoods with excellent landscaping on lots nearby, appear to sell for about 19% more than similar homes in other neighborhoods (Table 3, Column 2). This general neighborhood effect is highly significant and represents a positive spillover effect of neighbors’ landscaping investments on the value of nearby properties. This spillover effect was also positive in the earlier study at about a 12% rate (5).

Expected price effects from improved landscaping. The landscaping quality category omitted in equation (1) is the ‘poor’ category. Each increment in quality above poor (average, good, and excellent landscaping) is compared to lots that have poor landscapes in equation (1) through regression parameters (b6, b5 and b4, resp.). Often, in neighborhoods where homes sell in the $125,000 to $200,000 range, there are few poorly landscaped lots so that the choice is whether or not to upgrade from average to good or excellent.

The regression coefficients on EXSIZE (b4), GOODSIZE (b5), and AVGSIZE (b6) provide evidence on the return on investments in better landscaping (Table 4). Each of the coefficients is positive and b4 is greater than b5 and b5 is greater than b6. Excellent landscaping appears to return more than good landscaping and good landscaping returns more than average landscaping. Since all three parameters are significantly different from zero at least at the .01 level, it can be concluded that improving landscapes from poor condition to any of the higher quality categories will result in higher home sales prices.

The magnitude of the landscape quality effect on price increases with the size of the lot. To reveal the joint impact of the quality of landscaping and lot size on expected sales price, price is estimated using Equation (1) for a house with mean days on the market, central air, a garage, is not located on a heavily traveled road, and the adjacent lots in the neigh-

[5]To interpret the dummy variable coefficients as the percentage change effects on Price from a dummy taking on a value of 1 in a semi-logarithm equation requires the following transformation (8): gi = exp (bi – 1/2 V (bi) – 1; where,

bi is the regression coefficient from Table 3 or 6

V (bi) is the variance of bi

exp ( ) is the exponential operator

and 100 * gi is the corrected measure of the percentage impact of the dummy variable on Price.

Table 5. Returns to improved landscaping for homes with similar attributes and landscaping on adjacent lots good or worse, 1996-97, Greenville SC.[z]

Lot size in sq. ft.	Expected sales price			Landscaping premiums			
				Good/avg		Exc/good	
	Avg lots	Good lots	Exc lots	$	%	$	%
10,000	$99,633	$103,896	$109,939	4,263	4.3	6,043	5.8
20,000	$110,375	$115,462	$122,698	5,086	4.6	7,236	6.3
30,000	$117,189	$122,815	$130,837	5,627	4.8	8,022	6.5
40,000	$122,276	$128,315	$136,938	6,039	4.9	8,623	6.7
50,000	$126,374	$132,749	$141,865	6,376	5.0	9,115	6.9
59,600	$129,695	$136,347	$145,867	6,652	5.1	9,520	7.0

[z]Calculated by the author using regression results in Table 4 and the following characteristics: Central Air, Garage, mean square footage in home, not located on a heavily traveled road, without excellent adjacent lot landscaping, and mean days on the market.

borhood have excellent landscaping. Given these house and location characteristics, the landscaping on the lot varies from average to good to excellent.

The results of estimating this equation for the Greenville sample are shown in Figure 1 and for selected size of lot ranges in Table 4. In Figure 1, the results of estimating Equation (1) have been converted from logs to their corresponding dollar values for the sales price (Home Price) along the vertical axis. Similarly, the lot size is shown in square feet along the horizontal axis (Lot Size). House price increases as lot size increases but at a decreasing rate (the slope of the average curve becomes smaller as lot size increases). This simply indicates that, all else the same, the contribution of a given unit increase in lot size (say 1000 square feet) to expected home prices becomes smaller as the lot size increases.

The Average curve (AVG) in Figure 1 is the house price result for average landscaping on the specified home. Similarly, the Good curve shows the expected price on homes that have Good landscaping, all else the same. The vertical gap between the Average and Good curves yields the change in expected sales price for homes on various sizes of lots as landscaping quality improves. Finally, the Exc curve reveals the expected prices for homes with excellent landscaping.

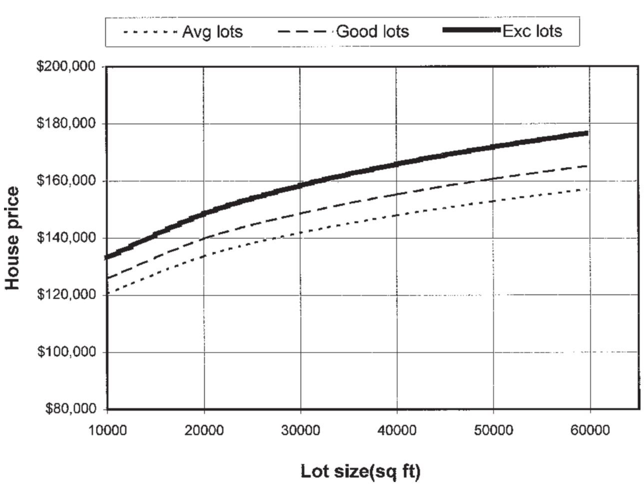

Fig. 1. Impacts on home prices in Greenville, SC, from improved landscaping

Table 4 presents the dollar and percentage changes in home prices from improved landscaping as depicted in Figure 1. As landscaping quality improves from average to good, expected price increase by about 4% to 5% (Table 4) for otherwise comparable homes. Another likely choice is whether or not to upgrade the landscaping from good to excellent. In this case, once a lot is already rated good, further upgrading results in a expected return of about 6% to 7% to home price.

To gain further insight into the effect of nearby quality of landscaping on the price of a given home, Equation (1) was re-estimated for homes that are adjacent to lots with less than excellent landscaping, all else the same. Selected results are shown in Table 5. The effect of having less than excellent landscaping on adjacent lots is to reduce all house prices compared to those in Table 4. Comparing results for the same house in Tables 4 and 5, the dollar landscape premium effects fall by about $1000 to $2000.

Since estimating the quality of the landscape is subjective, it is useful to merge the average and poor categories into avg-poor and the good and excellent categories into good-exc. This was done and the equation (1) re-estimated to allow comparisons over these quality aggregates. The regression results are displayed in Table 6. The landscape variable, EXGDSIZE, which is the interaction term, is formed by multiplying the LOGSIZE variable times a dummy variable equal to 1 for lots with Excellent or Good landscaping and equal to zero for others. Thus, the reference category is the aggregate of poor and average lots.

The landscaping parameter is again positive and significantly different from zero. Turning finally to the expected house price premiums by improving lots from poor-average to good-excellent, the comparable prices are listed in Table 7 for selected lot sizes as before. Results suggest a 14 % to 17% return on moving up from poor-average to good-excellent landscaping. This is a bit higher than the results in the earlier study that found a premium of 10% to 12 % for improving the quality of landscaping from poor-average to good-excellent (see 5 P. 69).

These results provide guidelines to homeowners as they make decisions on how much they can expect in added sales price if they invest in landscaping upgrades. The returns are influenced by lot size and the current condition of the landscape relative to other homes in the same general price range. Proper use of the regression model requires the analyst to specify the housing sub-market of interest (e.g., homes of the same square footage, lot size, etc.). Then, the compari-

Table 6. Regression results for comparison of house sales price effects from landscaping that is excellent/good versus average/poor. Dependent variable is the log of sales price.

Analysis of Variance

Source	DF	Sum of squares	Mean square	F-Value	Prob > F
Model	8	79.98830	9.99854	73.055	0.0001
Error	205	28.05696	0.13686		
C Total	213	08.04526			

Root MSE	0.36995	R-square	0.7403
Dep Mean	11.45350	Adj R-sq	0.7302
C.V.	3.23002		

Variable	Parameter Estimate	Standard Error	T for H0: Parameter = 0	Prob > |T|	Variance Inflation
INTERCEP	1.714417	0.65099053	2.634	0.0091	0.00000000
LOGSQFT	1.159186	0.07580306	15.292	0.0001	1.66082187
LOGSIZE	0.135272	0.05961323	2.269	0.0243	1.27956184
EXGDSIZE	0.014099	0.00574447	2.454	0.0149	1.11658759
HVYTRF	0.082262	0.07644153	1.076	0.2831	1.16192890
GARAGE	0.050542	0.05453188	0.927	0.3551	1.15420871
AIR1	0.171973	0.05169698	3.327	0.0010	1.04434892
AEXCEL	0.197802	0.06786305	2.915	0.0040	1.27129437
LOGDAYS	–0.077775	0.01889538	–4.116	0.0001	1.06787060

Table 7. Returns to improving landscaping from poor or average to good or excellent for homes with similar attributes, 1996–97, Greenville, SC.[z]

Lot size in sq. ft.	Expected sales price		Landscaping premiums	
	Poor-avg	Good-exc	$ increase	% increase
10,000	$112,540	$128,146	15,605	13.9
20,000	$123,603	$142,124	18,522	15.0
30,000	$130,572	$150,998	20,427	15.6
40,000	$135,753	$157,628	21,875	16.1
50,000	$139,913	$162,971	23,057	16.5
59,600	$143,277	$167,303	24,026	16.8

[z]Calculated by the author using regression results in Table 6 and the following characteristics: Central Air, Garage, mean square footage in home, not located on a heavily traveled road, with excellent adjacent lot landscaping, and mean days on the market.

sons over different landscaping quality can be evaluated for expected price effects within these sub-markets.

The results obtained in this research are similar to the earlier study of Greenville homes. In the earlier study, the base of comparison was poor-average landscaping versus good or excellent landscaping. In the 1991–93 sample, upgrades from good to excellent returned about 4% to 5% and from poor/average to good, the return in higher home prices was 7% to 9%. In the 1996–97 sample, the home price premium attributable to upgrading landscaping quality from good to excellent is 6% to 7% while from average to good, it is about 4% to 5%. Since the earlier sample used a combined poor/average base, the higher return on upgrades to good reflects a lower reference base for landscape quality than the 1996–97 sample.

Small changes in model specification added little to the overall fit of the regression (R-square or RMSE). Further, the statistical properties of the model suggest that the underlying assumptions of the regression are met and thus the inferences drawn are reliable. While the model presented is less detailed on housing attributes than some (e.g., 10), the addition of other attributes added little to the explanatory power and some were highly correlated, e.g., number of bedrooms and square footage. Finally, it is important to reiterate that the results presented here are for a single medium sized community in the Southern Piedmont region. Landscaping attributes in places unlike the Piedmont, e.g., Arizona, may be qualitatively different and homeowners may place higher or lower implicit values on landscaping.

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