

Chapter 12

Urban Containment and Neighborhood Quality in Florida

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Rapid suburbanization since World War II in America has created many of the challenges we face today. Roads intended to relieve congestion have become congested. Cookie-cutter subdivisions have replaced scenic landscapes. Once-vital downtown stores have been abandoned as shoppers transferred their allegiance to convenient suburban malls. The spread of low-density residential development made public transit impractical, making the automobile virtually the only choice for transportation. Automobile dependence has degraded the air in some places to alarming levels. Once-tranquil communities with their own unique character have been overwhelmed by more people, automobiles, and shopping centers. But the problem is not growth per se; the problem is how to manage growth in ways that minimize costs and maximize benefits to both individuals and the public at large.

Urban containment is an attempt to confront the reasonable development needs of the community, region, or state, and accommodate them in a manner that preserves public goods, minimizes fiscal burdens, minimizes adverse interactions between land uses while maximizing positive ones, improves the equitable distribution of the benefits of growth, and enhances quality of life. At its heart, urban containment aims to achieve these goals by choreographing public infrastructure investment, land use and development regulation, and deployment of incentives and disincentives to influence the rate, timing, intensity, mix, and location of growth. Broadly speaking, urban containment programs can be distinguished from traditional approaches to land use regulation by policies that are explicitly designed to limit the development of land outside a defined urban area, while encouraging infill development and redevelopment inside it.

In response to concerns about contemporary development patterns, some American states and metropolitan areas have attempted to contain the outward expansion of urban development. Although the idea of urban containment is not new in America—some New England townships in the 17th Century forbade homes from being built in the nearby farmland—its modern form arose only as recently as the late 1950s. Lexington and Fayette County, Kentucky, are credited with implementing the nation's first effort to contain urban sprawl, chiefly by limiting development to an area within an urban service line and preventing urban-scale residential development in the Bluegrass area around.

During the 1970s, urban containment emerged in a few more metropolitan areas, including Miami-Dade County, Minneapolis-St. Paul, Boulder, Sarasota, and Sacramento, and in one state—Oregon. Florida's growth management legislation in the middle 1980s enabled local governments to adopt various forms of urban containment strategies. Washington State adopted Oregon-style containment laws in the early 1990s and applied them to the most urbanized counties.

Beginning in the 1970s and continuing through the rest of the 20th Century, numerous metropolitan areas saw individual local governments pursue containment on their own, chiefly throughout coastal metropolitan California. Half a century ago there was but one clear example of urban containment in metropolitan America. Our research has revealed there are now more than one hundred metropolitan areas with at least one example of metropolitan-wide or local government containment. Examples are not limited to Sunbelt or West Coast regions where growth pressures are legion; Sioux Falls, South Dakota has one of the nation's oldest programs.

Urban containment seems to promise many things (see Nelson, 2000). Here, we focus our attention on neighborhood quality, an area of urban containment research that has not received much attention. Our particular focus is whether urban containment in Florida can be associated with neighborhood quality improvement since the advent of statewide growth management implemented in earnest in the late 1980s. We describe Florida's urban containment approach generally based on a review of Florida statutes, review issues of understanding neighborhood quality and how containment should relate to improving conditions over time, present our model and data, report results of data analysis, and offer implications for policy and research.

Urban Containment in Florida

Nelson and Dawkins (2004) created a typology of urban containment programs based on a content analysis of more than 100 containment plans, many from Florida. Their typology classifies most containment efforts in Florida as "strong-accommodating." That is, while plans must accommodate projected development needs, they must do so while also protecting natural systems and natural-resource based industries such as farming and fishing.

The genesis of Florida's approach to contain the outward expansion of urban development is found in the State Comprehensive Plan, adopted in 1985 and codified as Chapter 187. This Act requires all of Florida's 67 counties and 410 municipalities to adopt Local Government Comprehensive Plans that direct future growth and development based on 26 goals, with several hundred policies that guide state, regional, and local government planning and decision-making. While many goals address such areas as education, health, and the elderly, many others relate directly to land-use and facility planning in the context of urban containment. In our view, Florida planning statutes are clearly restrictive in attempting to prevent the outward expansion of urban development but also accommodating in meeting development needs. A sample of Chapter 187 goals and policies read like textbook principles of urban containment in that they encourage and sometimes require local plans to achieve

compact development patterns, preserve natural systems, maintain agriculture, create land uses that support transit options, achieve mixed-use development, and deliver public facilities and services efficiently. Florida Administrative Code Rule 9J-5 fleshes out how these and other State Comprehensive Plan goals and policies must be addressed by local governments.

Despite these provisions, however, urban containment—perhaps the embodiment of the planning principles espoused in the state planning acts—is not applied throughout the state. Nelson and Dawkins (2004) found that about a third of Florida counties had urban containment policies either countywide or in some cities. Does growth management generally or urban containment specifically achieve desired outcomes? Our review of many plans approved by the state allowed acreage homesites and planned communities in rural areas, created incentives for rural development where urban areas were at infrastructure capacity, and did not truly achieve the efficient land-use patterns desired. Several commentators have made similar observations (Chapin and Connerly, 2003; Porter, 1999; Sakowicz, 2004). We conclude that Florida-style growth management may not be much different from traditional land-use planning, except for those jurisdictions pursuing urban containment.

Urban Containment Influences on Neighborhood Quality

In many ways the debate surrounding urban containment is related to attitudes toward growth, even if in some instances containment policy may be more favorable to housing production (Nelson, Dawkins, and Sanchez, 2005; Nelson, Sanchez, and Dawkins, 2004). Growth advocates consider growth the route to economic well being that brings positive attributes of job opportunities, an increased tax base, and cultural and other amenities (See also Downs, 1998). But the anti-growth crowd declares growth harmful to the quality of life and to the environment, with the unintended consequence of straining local governments to provide additional services.

Smutny (1998) remarks that, “growth is a complicated phenomenon.” The public demonstrates a great deal of subtlety about growth. When the National Association of Home Builders polled households on their opinion of growth and growth management, 75 percent of the respondents indicated that they wanted to plan and manage growth but only 12 percent wanted to pass laws to restrict growth and only two percent favored laws to stop it (Ahluwalia, 1999).

Many detractors of urban containment do not necessarily endorse status quo development but they believe that urban containment policies make existing problems, such as crime and congestion, worse (Burnett and Villarreal, 2004; Campbell, 1998, O’Toole, 2001). To their way of thinking, density is the enemy.

Pro-growth advocates argue that if the public wanted more urban containment, the market would soon meet the demand (Gordon and Richardson, 1998; Staley, 1999). Some have even suggested that sprawl-free growth can be achieved if plans guiding development are based on urban containment principles (Heid, 2004). Also pro-managed growth scholars have noted that sprawl does provide many benefits for a large number of people despite its inefficiencies and high costs (Burchell and Mukherji, 2003; Downs, 1998).

But what are the major quality of life problems that sprawl generates? These quality of life killers are traffic congestion, open space consumption, excessive energy use, lack of infrastructure provision and improvement, NIMBYism, crime, concentrated poverty, poor schools, inadequate public services, and scarce fiscal resources (Downs, 1998; Yu, Johnson, and Zhang, 2004).

The urban containment movement seeks to reform state growth management legislation and is a reaction against the perceived ills of urban sprawl. There are two interest groups associated with urban containment. Pro-growth developers want to ensure a supply of land, reduce building costs, and be allowed to build a wide variety of housing types. Planners and environmentalists want to create more compact development, spur revitalization and infill, and encourage less dependence on cars. Both groups see livability as a goal.

Planners have begun to embrace many of the ideals of the New Urbanists as one means to achieve livability (Godschalk, 2004). Offering their prescriptions to developers for increasing livability in communities, New Urbanists advocate a specific set of desirable neighborhood characteristics that urban containment supporters have adopted as part of their principles to improve neighborhood quality of life.

There is some evidence that these characteristics contribute to a higher quality of life in neighborhoods. In studies of urban and suburban Portland neighborhoods, Lund (2003) and Song and Knaap (2004) both found that perceptions of neighborhood quality were influenced by having many of New Urbanist design characteristics in the neighborhoods.

Managed Growth, Urban Containment, and Quality of Life

Despite its unpopularity in some quarters, growth management, as well as its sister movement, urban containment, is seeking to balance the interests of both planners and developers with the needs of the community, state, and region. Hirschhorn (2000) concludes that urban containment means growth that is supportive of quality of life and quality-of-place, not slow- or no-growth.

As Nelson and Dawkins (2004) argue, growth management should meet development needs in a manner that preserves public goods, minimizes fiscal burdens, minimizes adverse interactions between land uses while maximizing positive ones, improves the equitable distribution of the benefits of growth, and enhances the quality of life. Yet there exists no comprehensive research looking at whether or not growth management programs have made a difference in the quality of life in those areas that have adopted them compared to areas that have not. Much of the advocacy literature on both sides of the sprawl and urban containment debate discusses declines in quality of life as a fact, but there is no empirical basis to state what exactly decline means. Hirschhorn (2000), for instance, claims that it has taken years of unmanaged, rapid growth to see the consequences of suburbanization, with many of them difficult to quantify individually but nonetheless profound when considered collectively.

We turn our attention now to issues of measuring quality of life and more particularly neighborhood quality.

An Overview of Quality of Life as a Concept

Quality of life is a complicated phenomenon with many definitions. For instance, Hirschhorn and Souza (2001) indicate traffic congestion, loss of open space, environmental impacts, and threats to economic growth and government budgets as the major contributors to a loss of quality of life. Myers (1988) measures quality of life in terms of the different levels of satisfaction of citizens in different residential locations based on traffic, crime, job opportunities, and parks. He goes on to note that a high quality of life results typically from growth because it creates jobs and often leads to higher wages. Further complicating the picture is that rapidly growing communities see older quality of life assets (such as open spaces and sense of place) transition to newer ones such as more shopping and restaurant options, and more economically and socially vibrant places. Longtime residents often do not appreciate the new quality of life assets yet the new assets can have the effect of making a community more attractive.

A recent study indicates that growth can fuel quality of life decline. Gabriel, Matthey, and Wascher (2003) found that there was substantial deterioration of the quality of life in some states that experienced rapid population growth during the 1981–1990 period. The analysis reveals that quality of life declined due to reduced investments in infrastructure, increased traffic congestion, and air pollution. In areas that did not experience fast growth, quality of life either remained relatively high or improved.

How should planning improve quality of life through managed growth? Myers (1988) believes that the role of planning is to improve quality of life by mitigating the negative impacts of growth. Planners can do this by slowing the rate at which these negative effects are felt or simply slowing the pace of physical change. If quality of life is maintained, he argues, the higher cost of locating there will be worth paying, and improving urban amenities could offset the loss of small town or environmental assets. For instance, Kahn (2001) found that while fast-growing metropolitan areas have falling rents (his measure of quality of life decline), real estate prices have risen in such slow-growing areas as San Francisco, where growth controls dominate the planning systems.

Myers (1988) remarks that the planning profession has been slow to adopt the quality of life concept partially because of the ambiguity of the idea. (Ambiguity is a characteristic the urban containment debate seems to encourage.) This is borne out in the literature: Most of the recent quality of life studies are not found in planning journals but rather in those devoted to geography, sociology, marketing, real estate, or economics. Among planners, there is some recent interest in general neighborhood quality (Greenberg, 1998), but most of their work assesses a particular planning technique (such as whether New Urbanism works) or is done for a policy evaluation purpose (such as building neighborhood indicators) (Lund, 2003; Sawicki and Flynn, 1996; Song and Knaap, 2004). Two studies on general neighborhood quality appeared in the planning literature around the late 1980s (Landis and Sawicki, 1988; Myers, 1988). Some recent empirical studies (Gabriel et al., 2003; Kahn, 2001) have investigated the decline of regional quality of life due to growth, but it is not clear whether their findings are generalizable to smaller geographical units.

Despite all the attempts to improve quality of life through growth management, quality of life may not be improving partly because of the way that these programs were enacted. Smutny (1998) reveals that state growth management legislation was enacted in two waves. The first wave in the 1970s was influenced by the environmental movement. The second wave, enacted in the 1980s and later, focused on the more global sprawl issues of economic development, housing infrastructure, quality of life and environmental concerns.

Do all the growth controls actually create better quality of life? There is anecdotal evidence that the second wave growth controls enacted in the 1990s may be hurting some communities' quality of life. For example, 2004 marks the third straight year that Coloradoans have repealed growth plans or reworked existing programs (Siebert, 2004). Loudoun County, Virginia has found itself on the verge of repealing its 1990s-style growth controls as well (Laris, 2001; Laris, 2004). Perhaps the real question is which type of growth control actually produces better quality of life?

Measuring Quality of Life

Quality of life is usually characterized as multidimensional, making measurement somewhat complicated. Measurements require consideration of both empirical or objective measures and qualitative or subjective measures (Greenberg, 1999; Sirgy, Rahtz, Cicic, and Underwood, 2000). Different types of data are often gathered and pooled in the analysis because there is often assumed to be a potentially significant relationship between objective and subjective measures. Subjective measures are the stronger correlates of neighborhood quality in most studies (Sirgy et al., 2000). Lund (2003) states that she uses subjective, personal level attributes in order to remove confounding variables and to reflect the causal priority of those that remain.

She also discovered, to her surprise, that attitudinal variables were the most powerful variables for predicting the empirical factors. Empirical measures, or "hard measures," include such variables as housing prices, employment rates, and numbers of facilities. According to Riecken and Yavas (2001), empirical measures are relatively easily defined and measured such as through easily counted units and can be reasonable proxies for measures of achievement and well-being. Empirical measures in quality of life studies are usually classified into five, somewhat overlapping, dimensions: Economic, Physical, Social, Satisfaction, and Personal.

Qualitative measures are also divided into the same five dimensions as above but use less objective measurements. They often involve surveying respondents regarding their individual subjective and self-reported perceptions, evaluations, attitudes, feelings, and levels of satisfaction in terms of their quality of life (Riecken and Yavas, 2001; Sirgy et al., 2000). Most qualitative measures involve surveys with scaled questions to measure the attitude strength.

Measuring Neighborhood Quality

Sawicki and Flynn (1996) warn of the methodological pitfalls of trying to construct neighborhood indicators. As with other quality of life measures, the unit of analysis must be carefully considered. Geographical concepts such as neighborhood are part

of a nested hierarchy of data, and care must be taken to ensure that the data gathered are for the correct unit of analysis and capture what residents believe to be their neighborhood. This is not an easy task; unfortunately what constitutes a neighborhood is difficult to establish without dispute (Song and Knaap, 2004). Widgery (1995), for example, defines a neighborhood as the geographic area considered by most individuals as their nearest social and psychic space outside the home. This definition does not lend itself very well to empirical definition. Song and Knaap observed that while their neighborhood construct relied on data-driven boundaries defined by the census tracts—block groups and sub-blockgroups—quantitatively derived definitions based on standardized empirical units do not always capture what individuals actually perceive as their neighborhood. The ambiguity of the neighborhood's definition is why it is important to use both subjective and objective indicators in measuring quality of life.

Other methodological concerns include the need to measure neighborhood change and the predictive capacity of neighborhood variables. Sawicki and Flynn argue that a well constructed neighborhood indicator should generate data that can measure meaningful change in neighborhoods over time. Greenberg, Schneider, and Choi (1994) argue that while it may seem inconsistent that neighborhood pleasantness is not included among the determinants of quality of life, such a variable would likely be unpredictable.

All this begs the question, though, about whether the neighborhood is even the appropriate locus for measuring the effect of urban containment on quality of life. For example, it may be possible that if urban containment stimulates infill and redevelopment, neighborhoods become denser; and to some, this could mean an erosion of quality of life. The process of infill and redevelopment may also take years or decades, during which time residents are impacted adversely such as through construction, rerouting of traffic, reduced sales among local businesses, and uncertainty as to how the changes will affect their lives, thus lowering quality of life. Despite temporal erosion in neighborhood quality of life, the quality of life in the larger community and perhaps the state could improve. Indeed, this is one of the tensions created through Florida's Growth Management Act: To elevate overall quality of life, the status quo may need to be disrupted and with it the local sense of quality of life.

More problematic for measurement is that even if quality of life erodes, it could possibly erode more without urban containment policies in place. Florida is one of the nation's fastest growing states. During the period 2000 to 2030, new development of all kinds could equal in volume the amount of development that existed in 2000. If this projected development is left unmanaged, quality of life could be threatened at all levels, from the neighborhood to the state. Nevertheless, growth management approaches such as urban containment may not be able to elevate future quality of life above a past level even if the alternative would have made people worse off.

If one assumes the neighborhood is the appropriate level of quality of life analysis, the question remains how to measure it. For instance, there does not appear to be much, if any, research using the American Housing Survey (AHS) data to assess neighborhood quality—despite the fact that this survey is the nation's most robust attempt to track housing, neighborhood, household, and socioeconomic changes

over time. Some researchers (Greenberg et al., 1994; Song and Knaap, 2004) use the AHS questions as inspiration for their own surveys, but they have not compared their results to corresponding data collected in the AHS.

In their study of environmentally degraded neighborhoods, Greenberg and Schneider (1996) used AHS data as baseline measures of some demographic and neighborhood quality variables. It is difficult to determine the comparability of their work to the present study, however, because they included additional data in their analysis. They also limited their focus to a few neighborhoods in New Jersey and specifically looked for poor neighborhood quality.

Model and Data

As we are interested in the association between urban containment and neighborhood quality, we tested for the following:

$$\text{Neighborhood Quality} = f[\text{Housing Attributes, Neighborhood Attributes, Market and Location Controls, Urban Containment Period}]$$

Before specifying each vector, let us review the source of data used in our assessment: the American Housing Survey. For nearly 30 years, the Census Bureau and the Department of Housing and Urban Development have supported the AHS. It is conducted biennially across the nation and periodically among more than 40 metropolitan areas. Since 1983 (and most recently in 2003), the AHS interviews 50,000 to 80,000 households nationally for information about their socioeconomic characteristics, housing attributes, and neighborhood quality, among other things. Our analysis includes all AHS national survey years from 1985 through 2003, ten in all. The year 1983 is excluded for lack of immediately available electronic data. The survey also includes metropolitan area identifiers. We used these data for two assessments, as follows.

Regional and Florida Comparisons

In order to determine if urban containment in Florida is effective in improving neighborhood quality over time, we compared quality indicators among metropolitan areas in states within the same region over time. Florida is grouped in the Census Bureau's Southeast Division, along with District of Columbia, Georgia, Maryland, North Carolina, South Carolina, and Virginia. With 25 million residents added between 1970 and 2000 and another 30 million projected for the period 2000 to 2035, it is the nation's fastest growing region in population. The region enjoys a mostly sprawling landscape in terms of development (aside from the Appalachian Mountain Range in the extreme western portions of some states) and is largely interconnected through transportation routes and economic linkages.

It is also a region with some important variations in planning regimes. Two states, Florida and Maryland, are among the nation's leaders in state-level planning, but Maryland's efforts are recent and not as comprehensive in scale as Florida's. Georgia

has state-mandated planning but none of the plan-making rigor seen in Florida or Maryland. North Carolina has one of the more rigorous coastal zone management programs; but as most of that state's growth occurs between the Appalachians and the Coastal Plain, state-level involvement in local planning and development decision-making is limited. South Carolina and Virginia have little state-level involvement in local planning or development decision-making, although urban containment exists in a handful of Virginia counties. These variations allow for interesting comparisons among the states' planning regimes in terms of neighborhood quality.

As AHS data for cases are coded for metropolitan areas, we could readily sort them by state, except where the metropolitan areas span state boundaries. In such instances, we assigned the case to the state with the greatest share of the metropolitan population. Washington, DC, which is the largest metropolitan area in the region (and fourth largest in the nation), spans parts of three states and the District. We used it as the "referent" to which the other states were compared. We also pooled all Florida metropolitan AHS respondents. While data did not allow us to compare individual metropolitan areas they did allow us to compare cases over time.

We had a certain expectation about the outcome. In recent work for the Fannie Mae Foundation, we (Nelson, Dawkins, Sanchez, and Danielsen, 2005) found that urban containment improves neighborhood quality over time. That is, while improvements could not be detected in early years of urban containment over a period of time extending about a generation (20–30 years) there is a positive association between urban containment and improving neighborhood quality. We surmise that it takes about a generation to redirect investment from sprawling landscapes to ones that are more central. As this happens neighborhood stability is enhanced and a sense of overall improvement in neighborhood quality is seen.

Specification

Since we were attempting to predict only the association between neighborhood quality and state planning regime (in the Southeast cross-section analysis) and between neighborhood quality and presence of statewide containment planning over time (in the Florida analysis), we used ordinary least squares regression. Based on our prior work for the Fannie Mae Foundation (Nelson, Dawkins, Sanchez and Danielsen 2005) we found that the variables reported in the following tables were appropriate for the analysis. For reasons we explain in our earlier work, the dependent variable is "neighborhood quality" as scored by respondents on a 1 to 10 scale, with 10 being of highest quality. This is a self-assessment exercise for which respondents are not given descriptions of differences between levels of quality. This is one of the limitations of panel data, but as our earlier research noted, this data is nonetheless a reasonable way in which to compare neighborhood quality across space and time. A brief description of the variables and how they are measured is included in the regression tables themselves. All data come from the American Housing Survey.

The experimental variables include Florida for the Southeast analysis and the urban containment periods for both analyses. The period 1991–1997, which includes AHS national surveys for 1991, 1993, 1995, and 1997, corresponds to the time when (nearly) all local governments had prepared plans deemed acceptable to the state

Table 12.1 Neighborhood quality regression results: Owner occupants in the Southeast Region

Variables and Measurement Scale	Overall Neighborhood Quality		
	Coefficient	t-Ratio	One-Tailed Sig.
Constant	7.547	0.452	0.326
<i>Housing Attributes</i>			
Unit adequate (1,0)	-0.101	-1.619	0.053
Housing unit quality (increasing from 1 to 10)	0.578	68.676	0.000
Age of unit (2004 minus year built)	0.001	0.763	0.223
Attached unit (1,0)	-0.140	-3.363	0.001
Number of units in bldg. (continuous)	0.001	2.332	0.010
Number of bedrooms (continuous)	-0.043	-1.999	0.023
Number of bathrooms (continuous)	0.083	2.786	0.003
Room air conditioning (1,0)	-0.004	-0.081	0.468
Central air (1,0)	0.161	2.592	0.005
No heat source (1,0)	0.150	1.446	0.074
Unit square feet (continuous)	0.000	2.342	0.010
Lot square feet (continuous)	0.000	0.530	0.298
<i>Neighborhood Attributes</i>			
Percent rental units in zone (continuous)	-0.370	-0.985	0.162
Percent African-American in zone (continuous)	-1.011	-3.037	0.001
Average family income in zone (continuous)	0.000	0.287	0.387
Average years of residence in zone (continuous)	-0.013	-0.895	0.186
Percent in zone reporting crime problems (continuous)	0.202	0.479	0.316
Percent in zone reporting noise problems (continuous)	0.132	0.151	0.440
Percent in zone reporting litter problems (continuous)	-2.333	-2.431	0.008
Percent in zone reporting undesirable land uses (continuous)	0.992	0.895	0.186
<i>Market and Location Controls (DC is referent)</i>			
Percent new units in zone (continuous)	-0.028	-0.041	0.484
Maryland (1,0)	-0.061	-0.587	0.279
Virginia (1,0)	0.126	0.875	0.191
North Carolina (1,0)	0.035	0.208	0.418
South Carolina (1,0)	-0.150	-1.282	0.100
Georgia (1,0)	-0.001	-0.013	0.495
Florida (1,0)	-0.219	-1.625	0.052
Central city (1,0)	0.066	0.790	0.215
Survey year (continuous)	-0.002	-0.215	0.415
<i>Urban Containment Period</i>			
1991–1997 survey year (1,0)	-0.261	-3.426	0.001
1999–2003 survey year (1,0)	-0.233	-1.968	0.025
<i>Regression Statistics</i>			
F			179.485
Adjusted R-square			0.298
N			13020

Dependent variable: Overall neighborhood quality (increasing from 1 to 10).

planning agency, the Florida Department of Community Affairs. We call this the “early implementation” period. The period 1999 through 2003 includes surveys for 1999, 2001 and 2003, and we call this the “middle implementation” period. Future analyses may include a “mature implementation” period but we suspect that will not be until at least three surveys after 2005. These periods also apply to Georgia, which adopted its statewide planning program in 1989, and marginally to Maryland, which adopted its in 1995.

Results

Table 12.1 reports results of the Southeast analysis while Table 12.2 reports results for Florida. We found no problematic collinearities. The coefficients of determination are modest but not unreasonable for studies of this sort.

According to the data presented in Table 12.1, there was no statistically significant association ($p < 0.01$) between state planning regime and neighborhood quality using metropolitan Washington, DC, as the referent. (This level of significance was selected because of the very large sample size.) We found a negative relationship between urban containment and neighborhood quality, but it was significant only in the first (1991–1997) period of the implementation of urban containment policies. We also found no general relationship with respect to survey year—an overall longitudinal measure. Similar results were obtained in the Florida analysis, as shown in Table 12.2. In effect, neighborhood quality eroded during the first third of a generation of urban containment (20–30 years after implementation), and urban containment policies appeared to have had a neutral or ambiguous effect during the second third. If our previous work (Nelson, Dawkins, Sanchez, and Danielson, 2005) proves out, the mature third period (and presumably thereafter) may see a positive association.

Interpretations and Implications

The first analysis compared neighborhood quality as perceived by AHS respondents over time for all metropolitan areas in the Southeast, controlling for the fixed effects of each state. The fixed-effects approach allowed us to determine differences in neighborhood quality between states with and without statewide growth management efforts. The model included variables for the presence of urban containment as well so that we could assess its impact even in states without statewide growth management.

The first analysis indicated no significant difference in neighborhood quality change between the states with or without growth management. Indeed, in all states, overall neighborhood quality declined during the study period and there seems to be no discernable difference in the trend between them.

On the other hand, we did find a negative association when considering urban containment in early years but not later. We surmised from a recent study (Nelson, Dawkins, Sanchez, and Danielson, 2005) that it takes about a generation (20 to 30 years) for positive effects to emerge. Most urban containment schemes in the Southeast and all but one in Florida (Miami-Dade) are younger than this. That

Table 12.2 Neighborhood quality regression results: Owner occupants in Florida MSAs

Variables and Measurement Scale	Overall Neighborhood Quality		
	Coefficient	t-Ratio	One-Tailed Sig.
Constant	-1.230	-0.048	0.481
<i>Housing Attributes</i>			
Unit adequate (1,0)	-0.152	-1.573	0.058
Housing unit quality (increasing from 1 to 10)	0.575	46.47	0.000
Age of unit (2004 minus year built)	0.002	1.272	0.102
Attached unit (1,0)	0.023	0.349	0.364
Number of units in bldg. (continuous)	0.001	1.025	0.153
Number of bedrooms (continuous)	-0.065	-1.857	0.032
Number of bathrooms (continuous)	0.244	4.962	0.000
Room air conditioning (1,0)	-0.089	-1.223	0.111
Central air (1,0)	0.138	1.417	0.078
No heat source (1,0)	0.044	0.397	0.346
Unit square feet (continuous)	0.000	0.912	0.181
Lot square feet (continuous)	0.000	-0.267	0.395
<i>Neighborhood Attributes</i>			
Percent rental units in zone (continuous)	-1.743	-2.568	0.005
Percent African-American in zone (continuous)	-1.984	-2.993	0.002
Average family income in zone (continuous)	0.000	0.291	0.386
Average years of residence in zone (continuous)	0.018	0.394	0.347
Percent in zone reporting crime problems (continuous)	0.495	0.817	0.207
Percent in zone reporting noise problems (continuous)	4.115	2.120	0.017
Percent in zone reporting litter problems (continuous)	-6.182	-3.559	0.000
Percent in zone reporting undesirable land uses (continuous)	2.583	0.751	0.227
<i>Market and Location Controls</i>			
Percent new units in zone (continuous)	1.570	1.266	0.103
Survey year (continuous)	0.340	2.270	0.012
Central city (1,0)	0.002	0.186	0.427
<i>Urban Containment Period</i>			
1991–1997 survey year (1,0)	-0.327	-2.765	0.003
1999–2003 survey year (1,0)	-0.348	-1.924	0.027
<i>Regression Statistics</i>			
F			101.534
Adjusted R-square			0.303
N			5788

Dependent variable: Overall neighborhood quality (increasing from 1 to 10).

neighborhood quality eroded in early years of containment but not later suggests that in future years containment may be associated with positive quality changes—similar to our national findings.

The second analysis looked at Florida specifically. Because by definition all jurisdictions in Florida pursue growth management, the major differences between them would be in the use of urban containment. As in the study of the Southeast, neighborhood quality was found to have eroded during the study period. In areas

with urban containment policies, neighborhood quality eroded more during the early years. In later years, however, there was no significant difference between containment and neighborhood quality change. We suspect this is for the same reasons we surmised for the Southeast as a whole.

This preliminary analysis does not show definitively that urban containment in Florida improves neighborhood quality. This does not mean that planning or urban containment *per se* reduces overall quality of life, however, because it is not possible to know the counter-factual: whether Florida neighborhoods would be better or worse off without the intervention. For instance, the "growth accommodation" orientation of Florida's Growth Management Act requires that growth projections be met—stopping or slowing growth to preserve perceived quality of life is not really an option for most Florida jurisdictions. Many neighborhoods are likely to be impacted as a result.

The analysis raises numerous methodological and policy implications. Methodologically, the literature (Lund, 2003; Sirgy et al. 2000; Song and Knaap, 2004; Widgery, 1995) suggests that quality of life studies are better when there is a mix of objective and subjective measures. Widgery (1995) goes on to speculate that there may be "various intervening variables interacting between the 'real world' and human perception. Such intervening elements may be found in differing aspiration levels or expectations by the observer of the objective world." He also discusses the fact that a person's "standards of comparison" and "accommodation" to surroundings may be intervening factors. On this score we note that the AHS does not include the number and variety of personal attitudinal variables that would be needed to allow for inferences about the strength of respondents' perceptions and attitude. Similarly, a study by the National Association of Home Builders (Ahluwalia 1999) found that 89 percent of the households in their survey were somewhat to very satisfied with the quality of life in their neighborhood—but compared to what?

Examining the effects of urban containment policies on quality of life makes explicit the struggles between existing and newly developing areas. To some, neighborhood quality may increase if development pressures are diverted from established neighborhoods to suburban fringe and rural areas. Yet, displacing development in this manner may exacerbate the very externalities (congestion, pollution, fiscal stress, destruction of sensitive landscapes) that erode state, community, and in many cases neighborhood-scale quality of life.

While we cannot conclude from this study that urban containment in Florida may eventually improve neighborhood quality, evidence from recent years indicate that it may not compromise it. It appears from analysis that in the intermediate term (after a decade of implementing adopted urban containment policies) growth management seems likely to improve existing neighborhood quality. This is consistent with Oregon's experience. Oregon's 1973 statewide planning legislation called for all jurisdictions to prepare and implement plans meeting state goals and guidelines based on a Year 2000 planning horizon. It took the state until the mid-1980s to have all the planning finished (Knaap and Nelson, 1992). Two books assessing Oregon's progress in achieving desired outcomes published in the 1990s were only mildly supportive of the regime given the modest indications of its effectiveness (see Knaap and Nelson 1992; Abbott, Adler and Howe 1993). It was not until about ten

years after full implementation of Oregon's plans (and 25 years after initial adoption) that results were measurable, in large part because objective data (such as census, transportation, pollution, etc.) were not available until then (see Nelson, 2000). The association of Florida's Growth Management Act with perceptions of increased neighborhood quality is remarkable given that Florida is the fastest growing of the states. Equally impressive is that this association appears to have occurred earlier in Florida's period of implementation than in Oregon's.

One axiom in medicine when treating a patient is "do no harm." Yet the purpose of medicine is to intervene when possible to elevate quality of life. Evidence seems to be emerging that in Florida the growth management "treatment" has begun to make neighborhoods better on the whole than they may have been without it.

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