

Market Acceptance *of* Smart Growth



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Executive Summary

Smart growth master-planned developments are growing in popularity, with tens of thousands of new housing units built in the 20-plus years since the creation of the earliest examples.¹ This extensive body of evidence presents an opportunity to evaluate the financial performance of smart growth housing compared to its conventional counterpart. Home buyers, developers, builders, and municipal leaders probably understand the environmental benefits, but they may still need information about the investment potential of smart growth projects. This report contributes to a better understanding of the impact of and potential for smart growth development approaches by considering long-term trends in price appreciation. It compares resale prices for single-family houses and townhouses in these developments with units in conventional developments that are equivalent in terms of size, age, amenities, and location. The report finds that not only do smart growth developments enjoy market acceptance as evidenced by stability in prices over time, but in study comparisons where sufficient performance conclusions could be determined, housing resales in smart growth developments often enjoyed greater resale appreciation than their conventional suburban counterparts.

Smart growth developments differ from conventional suburban developments in several ways:

- They offer a greater range of housing choices.
- They offer viable alternatives to driving by building compactly and placing commercial, office, and/or recreational uses within walking distance of homes.
- They place greater emphasis on a sense of place through site and building design that foster community interaction and protect natural resources.

By contrast, conventional suburban developments are generally residential only and usually have only one kind of housing—for example, detached single-family homes on large lots—which often means there is little diversity among the residents. Because they do not include shopping or offices, these developments require residents to drive to almost every destination.

This report uses resale data from 18 smart growth developments and 18 conventional suburban developments across the United States to contrast their appreciation between 1998 and 2004. Local real estate professionals were engaged to help ensure that contrasting developments were comparable in terms of local buyer preferences and market conditions. Twenty-one comparisons were completed in 17 case studies (in some cases, there were multiple developments within a single community). In 10 of those comparisons, the smart growth communities showed higher resale appreciation. In six of the comparisons, the conventional suburban communities showed higher resale appreciation. In two cases, the compared communities showed equivalent performance, and in three cases, inadequate data meant that no conclusion could be reached.

These results show that there is consumer acceptance of smart growth projects based on long-term housing values. Housing units in these developments not only hold their value over time, but in more cases than not, buyers are willing to pay a premium to live in these projects over other competitive suburban housing units in the same market. For developers, builders, and municipal leaders, this information should provide valuable insight into planning, approving, and developing smart growth projects.

¹ Seaside, Florida, began construction in 1981, and Kentlands, Maryland, began in 1988.

Section I: Introduction

Smart growth has become a more familiar development concept over the last decade. Smart growth strategies include design that uses land efficiently, mixes uses, and orients houses and other buildings to the street. The results include an environment that makes it safer and more appealing for people to walk or bike and gives them easier access to nearby destinations and services. This approach to development has been shown to generate a number of environmental and community benefits, such as reduced emissions from automobile use, reduced stormwater runoff per household, and more opportunities for residents to incorporate physical activity into their daily routines.² While these benefits are well-documented, there is less understanding of how the smart growth approach measures up to its conventional counterparts from a market perspective, specifically through resales of houses in smart growth developments. In other words, are the benefits of a smart growth approach to development captured in resale prices? If yes, how much of a premium do they offer for the homeowner and, by extension, the local government that favors a smart growth approach over conventional suburban development? This study attempts to answer these questions by examining how the resale performance of smart growth developments compares to their conventional suburban counterparts.

What Is Smart Growth?

Housing, commercial centers, civic buildings, open spaces, and transportation networks are the fundamental building blocks of all development. In smart growth developments, these uses are arranged around public spaces and transportation options. Residents can walk to work and shopping if they choose. They can live in a vibrant town center or a quiet single-family neighborhood, depending on their preferences. Changing the way the building blocks are assembled can make better use of investments in existing infrastructure and provide new opportunities to maximize public and private returns on new investments.³

Smart growth strategies help communities protect their natural resources, in part by steering new development away from critical open space and agricultural areas. They help people stay healthy by creating bike- and pedestrian-friendly communities where children and adults can walk to their daily destinations. Smart growth development uses energy more efficiently by allowing people to drive less if they choose and building more compactly. It creates the sense of community that people clamor for, in the form of town squares, public commons, urban plazas, and village centers.

In comparison, conventional suburban development is shaped largely by zoning practices that mandate a clear separation of uses. The building blocks of development are distributed across communities in single-use pods of office space, housing, and shopping. The primary means of connecting these distinct uses is a road network that funnels traffic from small neighborhood or office-park streets onto larger collector or arterial roads. This arrangement forces all traffic onto high-capacity roads, which creates congestion and makes walking or biking difficult because of heavy traffic and lack of direct routes. Because of the lack of connectivity and alternate routes, residents have little option but to drive.

The illustrations below show some of the differences between a conventional suburban community and a smart growth community. Both communities have commercial property, roads, homes, and parks. But these uses are arranged in two entirely different environments. Where conventional development isolates uses from one another, smart growth development integrates stores and offices into town centers that include

² For additional information on environmental and community benefits of smart growth, see: EPA. *Our Built and Natural Environment*. EPA 231-R-01-002. 2001. www.epa.gov/smartgrowth/built.htm.

³ D'Amour, David. *Infrastructure Costs Associated with Conventional and Alternative Development Patterns, Research Highlights*. Conventional and Alternative Development Patterns Phase 1: Infrastructure Costs. Canada Mortgage and Housing Corporation. Issue 26.

housing to make these projects active beyond the nine-to-five workday. Where conventional suburban development uses arterial thoroughfares as the access points to different use areas, smart growth development links residential, commercial, and recreational areas through a more pedestrian-friendly and connected network of integrated roads. Where conventional suburban development calls for low-density development of homes, segmented into pods and subdivisions by type of house, smart growth development mixes the types of housing and locates some in or near the town center.



Conventional suburban community



Smart growth community

Illustrations courtesy of Dover Kohl & Partners.

Whether they call it smart growth, new urbanism, neo-traditional design, or sustainable community development, many developers and planners have seen and responded to the demand for alternatives to conventional suburban projects for more than two decades. Two of the earliest and most prominent smart growth master-planned communities are Seaside, Florida, which began construction in 1981, and Kentlands, Maryland, which began in 1988. These projects are characterized by—and often best known for—their narrow setbacks and streets, close-knit mix of neighborhood uses, and architectural standards that orient buildings to the street. In some ways, these efforts draw inspiration from the most treasured and desirable pre-WWII town centers and neighborhoods in the country.

Smart growth is best defined by ten principles (see Exhibit 1) that were developed in 1996 by a national coalition of environmentalists, builders, planners, and others known as the Smart Growth Network. Network partner organizations include the National Association of Realtors, Urban Land Institute, American Planning Association, and the U.S. Environmental Protection Agency (EPA).⁴ The principles help guide community design and policy decisions. Each smart growth project discussed in this report incorporates most or all of the smart growth principles.

Exhibit 1: Smart Growth Principles

- Mix land uses.
- Take advantage of compact building design.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, farmland, natural beauty, and critical environmental areas.
- Strengthen and direct development towards existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair, and cost effective.
- Encourage community and stakeholder collaboration in development decisions.

⁴ For more information about the Smart Growth Network, see www.smartgrowth.org.

Yet while smart growth developments share common principles, they are certainly not cookie-cutter projects. Smart growth projects reflect and respect the distinctive character of the places where they are constructed, from architectural details to the preservation of natural open space. They also give the developer flexibility to identify the needs of the local market and to respond with new products that reflect consumer demands for choices in housing and transportation.

Purpose of Study

Smart growth development may be a recent market phenomenon in some communities, but tens of thousands of homes have been built in smart growth communities in the past two decades. EPA research measured the market and capital investment and determined that approximately \$9 billion dollars was invested in the construction of smart growth developments between 2000 and 2004.⁵ Nearly every state in the country can now point to examples of developments that reflect some or all of the smart growth principles. There are now enough units in mature projects to begin to measure how their price appreciation performs over time.

This report considers how housing units in smart growth projects hold their value over time. By examining sales data in smart growth developments, it is possible to draw market-based conclusions about how consumers value such housing and how they perceive the quality of these projects, both as a financial investment and as an investment in a community. These conclusions can be compared to sales data for houses in conventional suburban developments in markets where buyers have a choice between the two product types. The results of this study can inform developers and the public about the market acceptance of smart growth developments and the price stability and long-term value of the housing in these projects.

This report contributes to a stronger understanding of the public's acceptance for smart growth development approaches by considering long-term trends in price appreciation through consumer demand. Homebuilders, developers, citizens, elected officials, and planning staff can use this information to better estimate the market receptivity to smart growth housing developments against comparable, conventional alternatives. This report also demonstrates that not only is there market acceptance of the smart growth housing product, but that it often performs better from a resale perspective than its conventional suburban counterpart. Finally, this report builds on earlier studies that demonstrate that the design techniques employed in smart growth developments at the building, site, and plan levels manifest in a premium that is reflected in higher average sales prices.⁶ Collectively, these findings suggest that smart growth can create a sound local tax base that conveys economic benefits above and beyond the environmental and community benefits.

The landscape of growth, development, housing performance, and economic vitality is and will always be a moving target. There is no one fixed, ideal period of time to definitively evaluate the resale performance of the smart growth housing product compared to the conventional suburban alternative. This study used resale activity from 2000 to 2004 as a snapshot of smart growth performance. It represents a slice of a larger period of economic growth in some communities and retrenchment in others. Given the diversity of location, housing types, and resale points in time, this study offers an appropriate and accurate reflection of the resale performance of the smart growth housing product in a time of economic transition.

This report is organized into three sections: methodology, findings, and next steps. Section I of this study explains the methodology used to establish the set of developments that were examined. Section II summarizes the findings of the completed case studies, and Section III presents some next steps for further

⁵ www.epa.gov/smartgrowth/

⁶ See Mark J. Eppli and Charles C. Tu, *Valuing the New Urbanism: The Impact of the New Urbanism on Prices of Single-Family Homes*, Urban Land Institute, 1999, as well as the documents featured in Exhibit 2 and Exhibit 4 of this report, *The Market Acceptance of Single-Family Housing Units in Smart Growth Communities* and *The Option of Urbanism: Investing in a New American Dream*.

research. The appendix provides the detailed qualitative and quantitative data sets that were gathered for each of the case studies.

Section I: Methodology

Selecting the Projects

EPA retained Economics Research Associates (ERA), a global real estate research firm, to compile a set of case studies of housing developments in selected smart growth communities and conventional suburban communities and to evaluate them based on the long-term resale value of their housing units. The criteria for site selection and measurement were vetted through peer review by housing industry professionals.

Each smart growth project selected for analysis met the following criteria:

1. Reflects the smart growth principles (see Exhibit 1 in the Introduction) through its site and building design.
2. Is located within a region's infrastructure framework on a greenfield site.⁷ This means the project is in an existing urban, suburban, or rural market, not in a remote or isolated location.
3. Has an active amenity program that includes a mix of uses, a variety of housing types, and prices. It also has or intends to have retail goods and services at various price points, with similar gradations for other uses.⁸
4. Is on a site of 15 acres or larger. For planned communities on greenfield locations, the site must be large enough to include a variety of public and private uses to create a complete neighborhood or community.
5. Represent a product type distinctly identified as a smart growth project, not a conventional product type that is already well-defined and understood by the real estate industry.
6. Can demonstrate adequate long-term resale history for proper market analysis.

Based on the project criteria detailed above, smart growth projects were identified through data sources such as *New Urban News*'s Communities List and *The Town Paper*'s "TND Neighborhoods."⁹

The study also used data from each community's local Multiple Listing Service (MLS). MLS data are the most reliable and consistent source of detailed historical information on residential sales throughout the country. While sales data are available for properties nationwide, the data sets are not in a nationwide database. Rather, the data are organized regionally, and the home sales in a particular region can be accessed only by subscribing licensed brokers in that region. As a result, local real estate brokers were hired in each geographical market area to assist with data gathering by accessing regional MLS data.

Local brokers were critical to the data collection effort,¹⁰ particularly in the selection of conventional suburban comparables. Given the strong influence of regional tastes and consumer preferences on housing purchases, local brokers' practical and accurate knowledge was essential to selecting an appropriate conventional development in the same market and comparable to the smart growth community. The broker was asked to select two master-planned greenfield communities designed with conventional suburban standards that buyers in the market had considered while also considering the purchase of a house in the

⁷ Greenfield locations were determined to be most likely to have large conventional, suburban counterparts for comparison.

⁸ In contrast, single-purpose projects, such as golf communities, age-restricted developments, or second-home communities, would not be considered to have a multiple-marketing component, given that they rely on a single niche or buyer segment.

⁹ These data sources may also refer to smart growth communities as new urbanist, neo-traditional, traditional neighborhood development (TND), or sustainable or livable communities. *New Urban News*'s Communities List can be found in Steuteville, Robert and Langdon, Phillip. *New Urbanism: Comprehensive Report and Best Practices Guide*, New Urban News, 3rd edition, 2003. *The Town Paper*'s TND Neighborhoods list can be found at www.tndtownpaper.com/neighborhoods.htm.

¹⁰ Local brokers were not involved in the data analysis portion of this study, only in data collection.

selected smart growth community. Thus, the conventional suburban developments selected for analysis are verified market counterparts.

The local brokers checked MLS records to ensure that the houses in the selected communities were similar enough in terms of age, size, and pricing to represent a true market comparable. Annual property taxes and homeowners' association dues were also evaluated. Differences in lot sizes and property characteristics between the smart growth and comparable communities were considered, but were not major determinants of the price comparisons of the smart growth and conventional suburban houses because smart growth communities typically offer smaller lots in exchange for the amenities of a walkable, mixed-use environment. Community descriptions were generated by real estate brokers who detailed the developments' locations, house features, amenities, and any other characteristics that would affect prices. In some instances, developers were interviewed to confirm details about their communities. Typically, only one conventional suburban community had units similar enough to those of the smart growth community.¹¹ The most qualified community was selected as the market comparable.

Eighteen smart growth projects were identified and grouped into 17 case studies:

- Abacoa in Jupiter, Florida.
- Afton Village in Concord, North Carolina.
- Amelia Park in Fernandina Beach, Florida.
- Belmont Bay in Woodbridge, Virginia.
- Birkdale Village in Huntersville, North Carolina.
- Celebration in Osceola County, Florida.
- Fairview Village in Fairview, Oregon.
- Haile Village Center in Gainesville, Florida.
- I'On in Mount Pleasant, South Carolina.
- Kentlands and Lakelands in Gaithersburg, Maryland.¹²
- King Farm in Rockville, Maryland.
- Middleton Hills in Middleton, Wisconsin.
- Mount Laurel in Birmingham, Alabama.
- Orenco Station in Hillsboro, Oregon.
- Southern Village in Chapel Hill, North Carolina.
- Town of Tioga in Newberry, Florida.
- Vermillion in Huntersville, North Carolina.

Given the surge in smart growth projects since the 1990s, peer reviewers determined that 17 case studies and multiple comparisons was an appropriate study size. In the future, as more smart growth projects are completed and generate longer sales histories, larger study groups will be possible.

¹¹ In most cases, one conventional suburban development was chosen. Where two such communities were selected, it was because neither one had enough housing types to make it comparable on its own to the smart growth counterpart. For example, if a conventional suburban development was comprised solely of townhouses, a second conventional development was sought that contained single-family dwellings for comparison to the mix of housing (townhouse and single-family dwelling) in the selected smart growth development. In cases where no such comparable could be found (e.g., no conventional suburban townhouse development could be found that was comparable to a smart growth project), analysis of that housing type was dropped from the study.

¹² Due to the geographic proximity of these two projects, they were combined for comparison against the conventional suburban development.

Analyzing the Data

The data were analyzed to: 1) determine the price appreciation performance of housing in smart growth developments; and 2) highlight trends in the building and property characteristics associated with both types of products. Results of both analyses are described in Section II.

To determine the price appreciation performance for the study sites, ERA calculated the average sales prices per square foot in each year and generated the compound annual growth rate (CAGR) for the developments. Sales prices for all products were calculated on a square foot basis and analyzed as a percentage change in price per square foot, as well as a percentage change in total sales price. ERA then calculated all figures based on the changes from year to year (whether consecutive or non-consecutive), as well as from the first year to the last year of the study window, to show how the characteristics of each community's sold homes changed over time.

ERA selected the CAGR as the study's central measurement because it is considered the best formula for computing performance of investments over time and allows for easy comparison between two investments. It was not necessary for ERA to measure for statistical significance between the CAGRs because the methodology did not involve taking a sample of resales. All resales in a given community were evaluated, making any difference in CAGRs significant from a statistical standpoint. However, in determining highest performers in sales appreciation, ERA was called upon to make some judgment calls, specifically in cases where there were few resales. ERA elected not to identify top performers in three comparisons due to insufficient data. In these instances, one or more developments had only a handful of resales in multiple years, or the data did not show any apparent logical linear progression, instead fluctuating considerably each year, sometimes between positive and negative numbers. Thus the data sets in these three cases could not be used to draw reasonable conclusions.

CAGR is also an appropriate measurement because it stabilizes and smoothes variations found between individual years in the home sales prices. CAGR describes the rate of change between the beginning year and the end year if the change had occurred at a steady rate. It is considered the best formula for computing performance of investments over time and allows for easy comparison between two investments. Therefore, changing the years pulled for certain comparisons and pulling data from non-consecutive years did not affect the consistency of the study's results. Results depend on the time period selected, but as long as the two investments being compared (in this case, homes in smart growth and conventional suburban developments) are being compared over the same time period, the results are a valid indicator of the performance of the two investments in that time period.

MLS data were also used to support the second type of analysis in this report. In addition to determining appreciation performance, the detailed information available through MLS was used to analyze a number of characteristics associated with both smart growth and conventional products. As with any development, a wide range of specific characteristics helps constitute the housing bundle of goods, including house size, nearby amenities, and school quality. While MLS data vary by region, some housing characteristics are fairly uniform. Six indicators were selected to compare properties: living area, lot size, year of home construction, home price, price per square foot, and property taxes and homeowners' association dues. These indicators represent standard building and property characteristics used in the real estate industry, as well as the most readily and uniformly available descriptive data for housing across the country. For each project, minimum and maximum values for each indicator were calculated, as well as average values. The results of these summary comparisons are described in Section II, while each development is described in detail in the appendix.

Study Parameters

The purpose of this study was to contribute to a better sense of the impact of and potential for smart growth development approaches by evaluating residential price appreciation performance in smart growth and conventional suburban developments. The study investigated residential resale values only. Sales from the commercial components of smart growth developments were not considered, nor were new home sales. Estimating the sales prices of new houses would have involved contacting builders, estimating land costs, and evaluating any special mortgage rates that the builders had negotiated with lenders. Additionally, builders can offer incentives, packages for upgrades, and rebates, which can further complicate the pricing of new housing units. Further, most newly constructed dwellings are not found in the MLS system because builders typically sell directly to buyers without real estate brokers, sales agents, or Realtors as intermediaries. Therefore, studying the appreciation rates starting with the housing unit's original price would have been too difficult and costly for this study.

Some smart growth communities include townhouses, single-family detached dwellings, and condominium units. This study did consider different housing types, but only in comparison to their like kind. For example, townhouses in smart growth developments were compared only with townhouses in conventional suburban developments. Since single-family dwellings, townhouses, and condominiums were included in the study but never compared with each other, 21 comparison charts are presented in the appendix for home sales in the 17 case studies from 36 communities (18 smart growth developments and 18 conventional developments). Some developments had more than one type of housing unit but did not have a comparable community for some of the housing types. In those cases, only the comparable housing types were analyzed, although the range of housing options is noted in the project's description in the appendix.

Data for the case studies initially were sought for the years 1998, 2000, 2002, and 2004.¹³ Non-consecutive years were examined to investigate a broad time period. However, many projects were too young and did not have resales in 1998 and 2000. In such cases, data were gathered for consecutive years from 2001 through 2004.¹⁴ In two smart growth communities, Afton Village and Mount Laurel, there were no resale values until 2003, in which case data were used for consecutive years from 2003 through 2005. In these comparisons, there were insufficient data to draw a conclusion. All other case studies conclude with data from 2004. In all cases, data covered a minimum of three points in time (either consecutive or non-consecutive years) and were pulled for identical years for each smart growth community and its conventional counterpart.

While other studies (see Exhibit 2) have attempted to statistically control for all possible differences between communities using a hedonic pricing model that isolates components of housing valuation, this is a different kind of study. It focuses on current, on-the-ground market realities in which the practical and accurate knowledge of local real estate agents was used to select communities that actually compare with each other at the local level. Buyers are the best indicators of true market acceptance, and this study has attempted to select communities that buyers consider similarly attractive. This study's methodology is valid and clear, and peer reviewers accepted the findings, given these assumptions and the limitations of the available data. This report identified performance for each comparison study during the stated time period (or highlighted cases in which a determination could not be made with confidence). As market factors change, it is possible that the selected communities will no longer be comparable, or that results may change if the studies were replicated upon future examination.

¹³ The end year of 2004 was selected because that was the last year for which complete data sets could be gathered.

¹⁴ All told, nine smart growth communities (and their conventional suburban counterparts) were evaluated using this time period: Abacoa, Amelia Park, Birkdale Village, Fairview Village, Haile Village Center, I'On, Southern Village, Town of Tioga, and Vermillion.

Exhibit 2: Confirming Premiums for Smart Growth Over Time: An Update

In their groundbreaking 1999 work, *Valuing the New Urbanism*, Mark Eppli and Charles Tu undertook the first comprehensive examination of the price differential that homebuyers pay for housing in master-planned smart growth communities. Eppli and Tu selected four traditional neighborhood developments (TNDs) in four different housing markets. They identified TNDs that had a minimum of 150 sale transactions to compare against market-area housing that did not have the characteristics of TND projects, but maintained all other single-family housing characteristics. Single-family home prices were established using multiple regression analysis, specifically using variables to identify the purchase price of a single-family house in a TND. Kentlands, in Gaithersburg, Maryland, was one of the case studies selected in *Valuing the New Urbanism*. Based on sale transactions between 1994 to 1997, the authors found that in all four case studies, consumers were willing to pay a premium of 11 percent, on average, to live in a TND. Kentlands was found to have a price premium of 13 percent against market comparables.

In 2007, Mark Eppli and Charles Tu updated their research on Kentlands and added new research for Lakelands, a smart growth community adjacent to Kentlands. (Lakelands was too new to qualify for study in *Valuing the New Urbanism*.)

Using the same criteria and methodology they applied in *Valuing the New Urbanism*, Eppli and Tu used property data from the Maryland Department of Planning to identify almost 4,000 single-family sale transactions covering Kentlands, Lakelands, and the entire Gaithersburg 20878 zip code from 1997 to 2005.

The conclusions on housing premiums in *Valuing the New Urbanism* are confirmed in their updated work, *The Market Acceptance of Single-Family Housing Units in Smart Growth Communities*. This new paper concludes that, “After controlling for a series of site, interior, exterior, quality, and market characteristics... the price of single-family homes in Kentlands and Lakelands is estimated to be 16.1 percent and 6.5 percent higher than comparable homes in the surrounding conventional subdivisions respectively.”

Citing data from 1994 through 2005, the authors conclude that the price premium for single-family housing in Kentlands is maintained or increases over time, indicating a market acceptance for smart growth communities. With regard to Lakelands, the authors note that the 6.5 percent premium increased to 9.5 percent over conventional suburban development from 2002 to 2005—a sign of strengthening market acceptance as more of the project was built and more sale transactions occurred.

Eppli, Mark J. and Tu, Charles C. *Valuing the New Urbanism; The Impact of the New Urbanism On Prices of Single-Family Homes*. Urban Land Institute. 1999.

Eppli, Mark J. and Tu, Charles C. *The Market Acceptance of Single-Family Housing Units in Smart Growth Communities*. EPA. 2007. www.epa.gov/smartgrowth/sg_business.htm#p4.

Section II: Findings

As stated earlier, the data were analyzed to determine the price appreciation performance of housing in smart growth developments and to highlight trends in the characteristics associated with smart growth and conventional suburban communities. The analysis revealed three general findings about smart growth developments:

- In 21 comparisons, 10 smart growth developments had higher resale appreciation than conventional suburban developments, six conventional suburban developments had higher resale appreciation, two comparisons generated equivalent conclusions between the two different development projects, and three comparisons had inconclusive results.
- Smart growth housing units have building and property characteristics comparable to their conventional counterparts in many cases.
- In approximately 80 percent of the comparisons conducted, housing units in smart growth developments sold for higher average prices per square foot.¹⁵

Resale Performance and Appreciation

This study's hypothesis was that housing units in smart growth communities would, at a minimum, hold their value over time and in some cases out-perform their conventional counterparts. While the results were mixed enough to demonstrate the strength of both the conventional suburban product and the smart growth product, in the end this study supported the hypothesis and revealed a slightly stronger resale appreciation performance for houses in smart growth developments. Of the 21 comparisons generated for houses and townhouses in the 36 developments, the smart growth product outperformed its conventional counterpart in 10 of the comparisons, while the reverse was true in six of the comparisons.¹⁶ Home resale values in smart growth and conventional projects were roughly equivalent in two instances, and in three cases, the results were inconclusive due to too little available data. The summarized results are presented in Exhibit 3.

¹⁵ This finding contributes to the conclusion that smart growth units carry a premium in the market and suggests that they would reflect even greater price appreciation if they were the same size as their conventional counterparts, thereby yielding a higher overall sales price compared with a same-size conventional suburban house.

¹⁶ Top performance was determined by the greater CAGR figure for sales price per square foot, as described in Section I.

Exhibit 3. Summarized Results of Comparisons

| Smart Growth Development Case Studies | Location | Type of Homes | Conventional Suburban Development Comparables | Higher Rates |
|---------------------------------------|----------------------|------------------------|---|--------------|
| 1 Abacoa | Jupiter, FL | Single-Family Detached | The Isles and Egret Landing | CSD |
| 2 Afton Village | Concord, NC | Single-Family Detached | Laurel Park | n/a |
| 3 Amelia Park | Fernandina Beach, FL | Single-Family Detached | Breakers at Ocean Reach | CSD |
| 4 Belmont Bay Phase II | Woodbridge, VA | Townhouses | Belmont Bay Phase I | CSD |
| 5 Birkdale Village | Huntersville, NC | Single-Family Detached | Hampton Ridge | SGD |
| 6 Celebration | Kissimmee, FL | Single-Family Detached | Hunter's Creek | Equiv. |
| 7 Fairview Village | Fairview, OR | Single-Family Detached | Lakeview Estates | SGD |
| 8 Haile Village Center | Gainesville, FL | Single-Family Detached | Sterling Place | n/a |
| 9 I'On | Mount Pleasant, SC | Single-Family Detached | Belle Hall | CSD |
| 10 Kentlands and Lakelands | Gaithersburg, MD | Single-Family Detached | Quince Orchard Park | SGD |
| Kentlands and Lakelands | Gaithersburg, MD | Townhouses | Quince Orchard Park | CSD |
| 11 King Farm | Rockville, MD | Single-Family Detached | Park Overlook | SGD |
| King Farm | Rockville, MD | Townhouses | Park Overlook | SGD |
| King Farm | Rockville, MD | Single-Family Detached | Quince Orchard Park | SGD |
| King Farm | Rockville, MD | Townhouses | Quince Orchard Park | SGD |
| 12 Middleton Hills | Middleton, WI | Single-Family Detached | Northlake | Equiv. |
| 13 Mount Laurel | Birmingham, AL | Single-Family Detached | Forest Parks | n/a |
| 14 Orenco Station | Hillsboro, OR | Single-Family Detached | Jones Farm | CSD |
| 15 Southern Village | Chapel Hill, NC | Single-Family Detached | Lake Hogan | SGD |
| 16 Town of Tioga | Newberry, FL | Single-Family Detached | Cambridge Forest | SGD |
| 17 Vermillion | Huntersville, NC | Single-Family Detached | McGinnis Village | SGD |

Notes:

"CSD" is an abbreviation for conventional suburban development.

"SGD" is an abbreviation for smart growth development.

"n/a" indicates insufficient data points to draw a conclusion about performance.

"Equiv." indicates equivalent performance, such that a determination about better performance could not be made with confidence.

Building and Property Characteristics

The building and property characteristics of smart growth projects differentiate them from their conventional suburban counterparts. The way in which buildings orient to the street and the vibrancy of the pedestrian environment are hallmarks of smart growth development and often drive its higher valuation (see Exhibit 4). These factors are difficult to ascertain through existing data sets, however, particularly given the large-scale comparative analysis conducted for this study.

Nevertheless, the detail found in MLS databases does permit an analysis that demonstrates trends in smart growth developments as compared to their conventional counterparts along a range of building and property characteristics. Six indicators were chosen and analyzed: living area, lot size, year of home construction, home price, price per square foot, and property tax and homeowners' association dues. The findings demonstrate that smart growth houses tend to have building and property characteristics comparable to their conventional counterparts.

Exhibit 4: Housing Premiums in Walkable Urbanism

In his 2008 book, *The Option of Urbanism: Investing in a New American Dream*, Chris Leinberger tackles market-based opportunities for smart growth development, including premiums associated with housing in such projects. Leinberger, a real estate developer and visiting fellow at the Brookings Institution's Metropolitan Policy Program, refers to smart growth development as "walkable urbanism" and conventional suburban development as "drivable sub-urbanism." He offers something akin to a back-of-an-envelope test that readers can use in their own market to determine not only what the market demand is for smart growth development, but whether premiums are associated with this type of real estate product.

Using the real estate section from major metropolitan newspapers, Leinberger compares 2007 sales data from single-family detached (SFD) units and condominium units in high-end housing submarkets and urban centers in the Detroit, Denver, Seattle, and New York City metropolitan housing markets (Birmingham, Highland Ranch, Kirkland, and Westchester County, respectively). Leinberger takes the added step of gathering the comparative research from these markets from the National Association of Realtors' website.

When comparing the dollar per square foot sales prices between SFD units in the same markets, the walkable urban units had premiums over the drivable suburban units of 100 to 150 percent. The dollar per square foot sales comparison of condominium units established premiums for the units in walkable urban neighborhoods at 40 percent. Finally, the sales per square foot comparison between SFD and condominium units produced premiums for the walkable urban units of 51 percent to 200 percent. In the two cases where Leinberger compared SFD units to condominium units, he points out that premiums were realized despite the condominium units' being significantly smaller than the comparative SFD units, a sign of market preference for such real estate.

Leinberger finds that substantial premiums exist when comparing housing types found in existing walkable neighborhoods and existing drivable suburban neighborhoods. He concludes that people are willing to pay a significant premium for walkable urbanism.

Leinberger, Christopher B. *The Option of Urbanism: Investing in a New American Dream*. Island Press. 2008.

Living Area

Some people believe that houses in smart growth communities are smaller than conventional suburban communities' houses. Yet of the 21 comparisons, the conventional suburban houses had larger average living areas in both start and end years in just eight instances. In three cases, the conventional suburban dwelling units were larger in the end year only, reflecting the tendency of such communities to build larger houses in later development phases. Contrary to popular belief, however, houses in smart growth communities were larger on average in both start and end years in six competitive comparisons, and in four comparisons, the units were virtually the same size in both start and end years.

Lot Size

Because smart growth communities are more compact and walkable, houses in these communities could be expected to have, on average, smaller lots than those in more conventionally designed developments. While lot size was not available in all MLS systems due to regional variations in the reporting mechanisms, the available data were generally consistent with this expectation with a few exceptions.

Data were unavailable for five of the comparisons. Of the remaining 16 comparisons, nine showed conventional suburban communities' lots as larger on average than those in smart growth communities. In fact, a few comparisons showed conventional suburban development houses with lots that were two to four times the size of those in the smart growth communities. Four case studies, including Belmont Bay and Celebration, showed nearly identical average lot sizes. The remaining three case studies showed larger average lot sizes in smart growth communities.

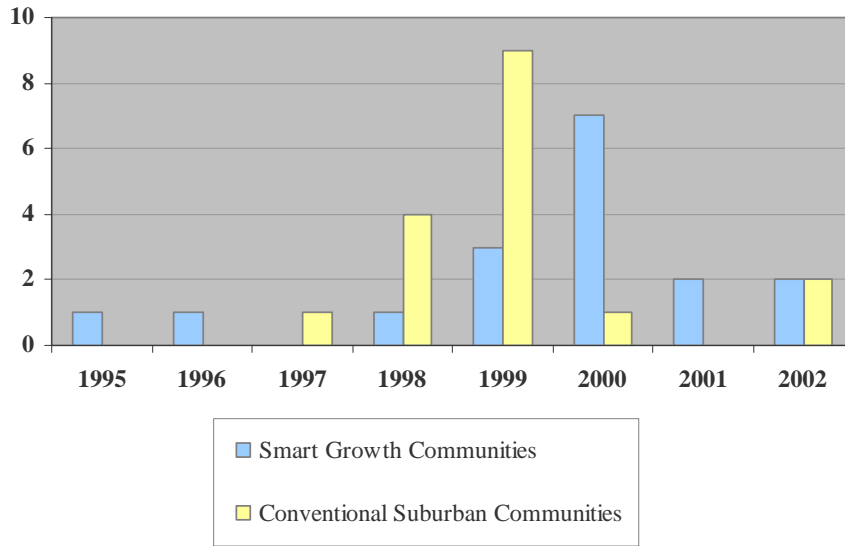
The data reveal two findings. First, maximum lot sizes for townhouses in smart growth communities exceed those of conventional townhouses. For example, the townhouse lots in King Farm and Park Overlook were close in average size, but the smart growth community had maximum lot sizes that neared 4,000 square feet, while those in the conventional community peaked at 2,400 square feet. Thus, the availability of larger lots in the smart growth community affected the average. Several other case studies revealed that some smart growth communities include larger lots for single-family home development than conventional suburban projects, in addition to the more compact development typical of smart growth. This occurs when smart growth projects offer an extremely broad mix of housing types. Examples are the case studies involving the single-family detached houses in Kentlands, Lakelands, and King Farm when compared with Quince Orchard Park. Kentlands, Lakelands, and King Farm had a broad range of lot sizes, from just over 1,000 square feet to more than 10,000 square feet, which skewed the average. In contrast, houses in Quince Orchard Park were on lots that ranged from just over 2,000 square feet to 4,700 square feet, a more modest range. These two findings affected only three of the 16 case studies with data on lot size, though in most smart growth communities, lot sizes are smaller than conventional suburban communities on average.

Year of Home Construction

The dates of home construction were analyzed by averaging the construction years of all houses sold in each community in the years studied. Thus, these averages do not reflect the average construction year of all units built within a given community, but rather the average construction year of houses that were sold during the years evaluated. As shown in Exhibit 5, 10 of the 18 smart growth communities studied sold houses that were built in 1999 or 2000 on average, while 13 of the conventional suburban communities had average completion dates from 1998 to 1999. When the average construction year of homes in smart growth communities is compared to their market comparables, as shown in Exhibit 6, ten of the groupings have comparables that fall within two years of each other. The largest gap by far was more than 16 years, which was between King Farm and Park Overlook. With that comparison excluded, the average years of home construction for all the smart growth communities fell within four years of the market comparable.

The average construction year of all homes sold is mid-1999 for smart growth communities and 1998 for conventional suburban communities, an average difference of 1.3 years.

Exhibit 5. Number of Communities by Average Year of Home Construction



Source: Multiple Listing Service, Economics Research Associates

Note: Not shown in the graph is Park Overlook, which had an average build date of 1985.

Exhibit 6. Average Year of Construction of Homes Sold

| Smart Growth Developments and Market Comparables | Avg Yr of Construction | Age Difference |
|---|---------------------------|-------------------|
| Abacoa | 2000 | |
| The Isles | 2002 | 2.2 |
| Egret Landing | 1998 | -1.4 |
| * Afton Village | 2000 | |
| Laurel Park | 2002 | 2.4 |
| Amelia Park | 2000 | |
| Breakers at Ocean Reach | 1998 | -2.7 |
| Belmont Bay (Smart Growth) | 2002 | |
| Belmont Bay (Conventional) | 1998 | -3.4 |
| Birkdale Village | 2000 | |
| Hampton Ridge | 1999 | -1.9 |
| Celebration | 1999 | |
| Hunter's Creek | 1999 | 0.1 |
| Fairview Village | 1999 | |
| Lakeview Estates | 1999 | 0.8 |
| * Haile Village Center | 1996 | |
| Sterling Place | 1999 | 2.8 |
| I'On | 2000 | |
| Belle Hall | 1997 | -3.3 |
| Kentlands | 1995 | |
| Quince Orchard Park | 1999 | 4.0 |
| Lakelands | 2000 | |
| Quince Orchard Park | 1999 | -1.0 |
| King Farm | 2001 | |
| Quince Orchard Park | 1999 | -1.2 |
| Park Overlook | 1984 | -16.3 |
| Middleton Hills | 2000 | |
| Northlake | 1999 | -1.2 |
| * Mount Laurel | 2002 | |
| Forest Parks | 1999 | -2.6 |
| Oreco Station | 1999 | |
| Jones Farm | 1999 | -0.3 |
| Southern Village | 1998 | |
| Lake Hogan Farms | 2000 | 1.7 |
| Town of Tioga | 2000 | |
| Cambridge Forest | 1998 | -1.9 |
| Vermillion | 2001 | |
| McGinnis Village | 1999 | -2.4 |
| All Smart Growth Developments | 1999.6 | |
| All Conventional Suburban Developments | 1998.2 | -1.3 |

Source: Multiple Listing Service, Economics Research Associates

Note: Communities with an asterisk (*) had very few data points in the years studied.

Home Prices

Of the 21 comparisons conducted, 14 revealed smart growth communities with higher average home prices in the starting year of the comparison. By the last year studied, smart growth communities had higher average home prices in 14 of the comparisons, although not necessarily the same communities that had higher home prices in the starting years. But 11 comparisons did show home prices higher in the same smart growth communities in both the starting and ending years. The results varied according to the specific development and market being evaluated. However, these data indicate that in a snapshot of any

one year, two-thirds of the smart growth communities had higher average prices when compared with houses in conventional suburban communities.

Price per Square Foot

For analysis of price and market valuation, each smart growth community's average price per square foot (not the compound average growth rate) was compared with its conventional suburban counterpart in both the first and last years of study. Approximately 80 percent of all comparisons showed higher average prices per square foot for smart growth communities' houses than for those of their conventional counterparts. In a hypothetical situation in which two houses of identical size in market-comparable communities are sold sometime between 1998 and 2004, this finding reveals that it is very likely that the product in the smart growth community would sell for more money, regardless of the year of sale. This result indicates that, in general, smart growth houses are valuable to both buyers and sellers.

Yet this finding may have affected the outcomes of the analysis of the projects' resale appreciation rates. Each comparison calculated the percent difference in the average prices per square foot between the smart growth and conventional suburban communities. These percentages were then averaged across all of the comparisons. Smart growth communities' average price per square foot was 13 percent higher than their conventional suburban comparables. Since most smart growth communities began with a higher average price per square foot than their comparable, it may have been more difficult for them to attain the same CAGR as a market comparable that began with a lower price per square foot.

Property Taxes and Homeowners' Association Dues

Differences in property taxes and homeowners' association dues affect the cost of living and thus can make one community more attractive than its market comparable. It was therefore important to consider significant property tax and homeowners' association dues differences in this analysis to help explain price differentials. These indicators are not, however, as reliably reported in the MLS system as the other measurements discussed here. Due to regional differences in the MLS databases, some communities did not have this information. Of the 18 smart growth developments and their 17 comparisons, the MLS system did not provide property tax values for six comparisons and did not give homeowners' association dues for four comparisons. In these instances, the brokers were asked to verify similar property taxes between the houses in different communities, which helped ensure that the communities served as market comparables.

Other issues complicated the use of these data. In some cases, real estate agents incorrectly entered the data into the MLS system when the property was originally listed for sale, as demonstrated by some listings showing monthly homeowners' association dues that were identical to the annual dues reported for other properties. This may be coincidental, or it may have been caused by whoever entered the data into the MLS not paying attention to whether fees were calculated annually or monthly. Regarding property taxes, the MLS data do not specify the year for which the property tax amount is reported. As such, this study has reported the numbers from the MLS system as listed and verified the figures for both property taxes and homeowners' association dues with local brokers wherever possible.

Despite the aforementioned concerns, most smart growth communities reported average property taxes and homeowners' association dues that were similar to their market comparables. Of the 11 studies for which property tax information was available, eight had similar average property taxes. Property taxes were considered similar if, in each evaluated year, the average property tax bills for a given community were within several hundred dollars of its market comparable. An annual tax bill difference of, for example, \$300 is not likely to affect which community a buyer selects, especially when so many other criteria are more significant to buyers. The three comparisons with notable property tax differences can be attributed to variation in house prices between the competitors, which is likely to affect the assessed value of the

properties and thus property taxes. Of the 13 comparisons for which homeowners' association dues were listed, nine had similar homeowners' association dues. The remaining four comparisons had differences of no more than \$500 per year, as well as ample evidence for improper entry of true homeowners' association dues at the time of sale. It was determined, therefore, that differences in property taxes and homeowners' association dues have not affected the market comparability of any properties studied.

Conclusion

The data analysis supports the hypothesis that smart growth products perform as well as, if not better than, their conventional suburban counterparts. Of the 21 comparisons generated for housing units in the 36 developments (18 smart growth, 18 conventional suburban), the smart growth housing units outperformed their counterparts on resale price in 10 of the studies, while the conventional suburban housing units outperformed in six of the studies. The remaining projects demonstrated resale performance that was roughly equivalent or was inconclusive.

Some generalities can be drawn from the analysis:

- Smart growth communities demonstrated higher home prices than their conventional suburban counterparts.
- Conventional suburban development houses were generally larger than their smart growth counterparts.
- Smart growth houses posted higher prices per square foot than their conventional suburban counterparts.
- Houses in conventional suburban developments generally had larger lots than their smart growth counterparts.
- Smart growth houses were generally newer than their conventional suburban counterparts.
- Property taxes and homeowners' association dues were generally comparable between smart growth and conventional suburban houses.

Yet there are also a number of interesting revelations within these broad conclusions:

- Smart growth communities generally offer larger lots for townhouses than do their conventional suburban counterparts, and they can include single-family house lots of comparable size, despite their overall emphasis on compact site design. Indeed, in nearly half of the projects surveyed, living area in smart growth houses was the same as or larger than in its conventional suburban counterpart.
- Higher prices per square foot for smart growth projects means that, when compared to a conventional suburban house of identical size, a consumer premium is reflected in the resale price for the smart growth product. Given the careful consideration in this study of other factors such as taxes, homeowners' association fees, and size variables, this premium can be seen as a valuation of the smart growth project's design and site characteristics.
- On average, smart growth houses tended to be newer than their conventional suburban counterparts, possibly reflecting a market shift away from conventional suburban development toward building communities that reflect smart growth principles.
- In many instances, the comparative analysis was limited to single-family detached housing units because the conventional development counterpart had no attached housing. Yet the smart growth housing outperformed the conventional comparable even with mixed housing types sharing the same blocks and streets. Some parts of the real estate industry have suggested that homebuyers do not want to live in neighborhoods with different types of housing or different price points (which translates to having different types of people living in the neighborhood). This finding suggests that plenty of homebuyers want to live in this type of diverse neighborhood and that home prices are not negatively affected by such a strategy.

Exhibit 7: Valuing Sustainable Urbanism in the United Kingdom

Smart growth projects are not limited to the United States. TND Neighborhoods, an online resource that tracks smart growth projects in the United States and abroad, noted in 2008 that Australia, Canada, and the United Kingdom each had more than 10 smart growth projects, with another 22 projects in eight other countries.¹⁷ Proponents abroad are examining whether such projects generate housing price premiums and hold their value over time compared to conventional development. To further this research, the Prince's Foundation for the Built Environment, Savills, and the English Partnership published *Valuing Sustainable Urbanism, A Report Measuring and Valuing New Approaches to Residentially Led Mixed Use Growth* in 2007. The principles and characteristics that define sustainable urbanism are similar to the smart growth principles.

The authors claim that urban places hold their value and perform better in market cycles than unidentifiable, homogenous places, stating: "Our own observations, and those of property market specialists, are that the most value accrues to the timeless places, where astonishing levels of mixed use and density are achieved, although they would not be built today.... These are also places that keep value through lean periods and recover their premium quicker. ... By comparison, there are places whose character and identity have been compromised to the extent that their homogeneity offers no market differential, and this has a suppressant effect on their market performance... [I]n the prosperity of recent times, [such places] are not necessarily trapped in unbreakable cycles of poverty but have become the 'nowhere' places lacking the means to place a value on identity in a fickle market."

Similar to this study, *Valuing Sustainable Urbanism* focuses on historic sales valuations of residential housing units over time, on a £ per square foot basis. The authors examine three case studies, each containing one sustainable urban project, one conventional (standard) suburban project, and one traditional (old) urban neighborhood in the town center. The analysis finds higher land values, higher housing premiums, and higher rates of appreciation associated with sustainable urbanism.

The authors find that sustainable urbanism is not only a more viable economic alternative than conventional development, but that its design is better equipped to meet the housing necessary to accommodate projected growth rates.

The Prince's Foundation for the Built Environment, Savills plc, and The English Partnership. *Valuing Sustainable Urbanism: A Report Measuring and Valuing New Approaches to Residentially Led Mixed Use Growth*. 2007. www.princes-foundation.org/files/0707vsureport.pdf.

¹⁷ TND Neighborhoods. Web page. *The Town Paper*. www.tndtownpaper.com/neighborhoods.htm. Accessed on September 26, 2008.

Section III: Next Steps

This report finds that housing units in smart growth communities are strong market comparables in local housing markets and that their price per square foot and resale premiums are sustained over time. In the future, others may wish to reexamine the performance of these developments, apply the same methodology to other projects, or identify additional methods of analysis. This section offers additional insight and other opportunities to those interested persons considering expanding this research.

EPA recommends gathering more robust data for more projects and longer resale histories because such data sets would paint a fuller and more accurate picture of smart growth developments' resale appreciation performance. With more mature smart growth developments, deeper sales transaction histories, and more conventional suburban developments with which to contrast them, a clearer picture of how they are valued by the market over time can emerge. Future studies might also consider an approach that would track the sales of specific smart growth properties and comparable conventional properties over time. This type of longitudinal study could compare all homes with a certain floor plan in one community with another floor plan of similar square footage in another community. Such a study would require site visits, property tours, and a long enough study window to allow the homes to be resold multiple times.

Other study efforts could return to this data set and repeat the study using the same projects, tracking from 2005 to the present. A variation on this approach would be to use the projects in this study to conduct a micro-study on how resales performed during the housing downturn that started after this report's study window. Many news articles¹⁸ have suggested that housing projects with transportation choices (including walking and biking), particularly those in more central metropolitan locations, held their values better than conventional suburban developments in greenfield locations that are wholly dependent on automobile use. Such a study would validate those hypotheses.

A velocity or "time on market" study would also be useful to developers and builders seeking to build new smart growth developments. This type of study would provide insight into how quickly developers and builders could sell lots and houses against debt repayment obligations.

The results from the King Farm, Kentlands, and Lakelands developments show that having multiple smart growth developments in the same market does not diminish their market performance. Future research could extend this analysis to other markets with multiple smart growth developments.

Finally, while this study limited its project selection to greenfield projects, both smart growth and conventional suburban, future efforts could also include a third project category for comparative purposes, such as an existing in-town or inner-ring suburban neighborhood in the town where the other market comparable projects are located, as was included in *Valuing Sustainable Urbanism*.

This study provides a basis for developers and local decision-makers to pursue a growth strategy that encourages more housing units in smart growth, new urbanist, or traditional neighborhood developments. This study shows indications of the strong financial performance of housing values in smart growth developments and the economic benefits they can deliver for homeowners, investors, and local governments, in addition to the many environmental and community benefits documented in other research.

¹⁸ See Ruben, Barbara. "Stagnant Market Has Ups, Downs Across Region." *Washington Post*. April 24, 2008. See also Gopal, Prashant. "Unraveling the Suburban Fringe." *Business Week*. July 12, 2008.

Appendix

This appendix provides information on 17 case studies using data compiled from 36 greenfield projects: 18 smart growth developments and 18 conventional suburban developments. These 36 projects produced 21 separate comparisons of housing resale appreciation, including 17 single-family detached and four townhouses. In 10 of the comparisons, the smart growth communities showed higher resale appreciation. In six of the comparisons, the conventional suburban communities showed higher resale appreciation. In two comparisons, communities showed equivalent performance, and in three cases, inadequate data meant that no conclusion could be reached.

EPA contracted with Economics Research Associates (ERA) to compile and complete these case studies. Each case study includes project descriptions, a summary of the data collected, and an analysis of the study results. In almost all case studies, a locally based real estate agent with extensive local knowledge was hired by ERA to provide project descriptions, select market-comparable conventional suburban developments, and obtain Multiple Listing Service (MLS) data. If a local real estate agent or MLS was not available, other real estate service providers were hired to collect this information. Real estate agents and real estate service providers played no part in analyzing sales data, nor was the purpose for the data collection known to them.

ERA compiled and analyzed the data and produced its conclusions to EPA in 2005. The property summaries describing the projects and the construction status occurred in 2006. EPA collected the website links to the case study projects, where available, in 2008.

Comparative Case Studies Summarized

| Smart Growth Development Case Studies | Location | Type of Homes | Conventional Suburban Development Comparables | Higher Rates |
|---------------------------------------|----------------------|------------------------|---|--------------|
| 1 Abacoa | Jupiter, FL | Single-Family Detached | The Isles and Egret Landing | CSD |
| 2 Afton Village | Concord, NC | Single-Family Detached | Laurel Park | n/a |
| 3 Amelia Park | Fernandina Beach, FL | Single-Family Detached | Breakers at Ocean Reach | CSD |
| 4 Belmont Bay Phase II | Woodbridge, VA | Townhouses | Belmont Bay Phase I | CSD |
| 5 Birkdale Village | Huntersville, NC | Single-Family Detached | Hampton Ridge | SGD |
| 6 Celebration | Kissimmee, FL | Single-Family Detached | Hunter's Creek | Equiv. |
| 7 Fairview Village | Fairview, OR | Single-Family Detached | Lakeview Estates | SGD |
| 8 Haile Village Center | Gainesville, FL | Single-Family Detached | Sterling Place | n/a |
| 9 I'On | Mount Pleasant, SC | Single-Family Detached | Belle Hall | CSD |
| 10 Kentlands and Lakelands | Gaithersburg, MD | Single-Family Detached | Quince Orchard Park | SGD |
| Kentlands and Lakelands | Gaithersburg, MD | Townhouses | Quince Orchard Park | CSD |
| 11 King Farm | Rockville, MD | Single-Family Detached | Park Overlook | SGD |
| King Farm | Rockville, MD | Townhouses | Park Overlook | SGD |
| King Farm | Rockville, MD | Single-Family Detached | Quince Orchard Park | SGD |
| King Farm | Rockville, MD | Townhouses | Quince Orchard Park | SGD |
| 12 Middleton Hills | Middleton, WI | Single-Family Detached | Northlake | Equiv. |
| 13 Mount Laurel | Birmingham, AL | Single-Family Detached | Forest Parks | n/a |
| 14 Orenco Station | Hillsboro, OR | Single-Family Detached | Jones Farm | CSD |
| 15 Southern Village | Chapel Hill, NC | Single-Family Detached | Lake Hogan | SGD |
| 16 Town of Tioga | Newberry, FL | Single-Family Detached | Cambridge Forest | SGD |
| 17 Vermillion | Huntersville, NC | Single-Family Detached | McGinnis Village | SGD |

Notes:

“CSD” is an abbreviation for conventional suburban development.

“SGD” is an abbreviation for smart growth development.

“n/a” indicates insufficient data points to draw a conclusion about performance.

“Equiv.” indicates equivalent performance, such that a determination about better performance could not be made with confidence.

Case Study 1: Abacoa

Abacoa is a smart growth community in Jupiter, Florida. It did not have any residential resales in 1998 or 2000. As such, resales in Abacoa and its counterpart communities were pulled for consecutive years from 2001 to 2004. Two comparable conventional suburban communities were selected: Egret Landing, which is also in Jupiter, and The Isles in nearby Palm Beach Gardens. Both of the comparable communities have single-family houses only, while Abacoa has some townhouses. Since the broker was unable to find a counterpart community with townhouses, the analysis considers single-family houses only.

Project Websites

Abacoa: <http://www.abacoa.com/>

The Isles: <http://www.lifetimerealty.com/divostacomm/isles.htm>

Egret Landing: <http://www.egretlanding.com/>

Smart Growth Community Description: Abacoa

Project Summary

Abacoa is a 2,055-acre master-planned community that was designed using smart growth principles. Construction began in 1998, and the first residents moved into the development in early 1999. Upon completion, it will include 5,800 residential units in a variety of building types, retail space, office space, a hotel with conference facilities, and several parking garages. According to the developer, the community experienced a rapid increase in value between 2000 and 2005, with many home values increasing by 100 percent.

Location

The community is just two miles from the Atlantic Ocean. By car, both Interstate 95 and the Florida Turnpike are five to ten minutes from Abacoa, and the community is approximately 15 to 20 minutes north of Palm Beach International Airport. Abacoa's Town Center, which features restaurants, bars, galleries, and retail space, is a short walk or bike ride from most homes in the development. Abacoa is in the Jupiter School District, which is A-rated according to GreatSchools.org. Two new public schools were being constructed in the community at the time this summary was written in 2006.

Home Characteristics

Abacoa's single-family homes all use concrete block construction with poured-concrete second-story floors. The townhouses are constructed using poured-concrete walls and floors. All roofs are composite shingle. The development's single-family detached homes have two-car garages, and the townhouses have garages for either one car or two cars. The community's homes have front porches and alley-access garages.

Community Amenities

Each of the three subdivisions has amenities that include a clubhouse, pool, open green space, and a playground. At the time of this study (2005), in the Newhaven subdivision, the homeowners' association fees were \$2,152 annually for single-family detached homes and \$1,740 annually for townhouses and included outside lawn maintenance for each home, as well as basic cable television. In The Island neighborhood, annual homeowners' association fees were \$2,500 for a single-family detached home and \$2,240 for a townhouse. In Charleston Court, association fees were \$1,640 annually. Membership to the Abacoa Golf Club, which is semi-private and allows residents to either become members or pay for individual games, is not included in the homeowners' dues.

The community has 10 subdivisions, most of which were still under construction in 2006. Three of its residential subdivisions had home resales as far back as 2001: Newhaven, The Island, and Charleston Court. Data on resales from these three neighborhoods were analyzed. When completed, these three subdivisions will contain approximately 600 single-family detached residences. The Island at Abacoa contains 176 single-family homes and 50 townhouses. According to the broker, The Island is the most distinctive and exclusive of the community's subdivisions because of its size and because it is surrounded by the Abacoa Golf Course, the only course in the development. The Charleston Court neighborhood offers townhouses and is the only neighborhood besides The Island that has some homes with views of the golf course. Newhaven is a neighborhood with 505 Victorian-style homes and tree-lined streets.

Conventional Suburban Community Description: The Isles

Project Summary

The Isles contains residences only and does not include commercial space. Homes in the community were constructed and sold in 2000, with homeowners moving in as early as 2001. Home types include attached single-story homes, which are called patio homes, as well as single-family detached dwellings. The developer asserts that the attached patio homes are competitive with small single-family detached homes rather than townhouses, despite the fact that they have a common wall. The homes in the community have experienced a rapid appreciation in value since construction, similar to the homes in Abacoa.

Location

The community is two minutes from Interstate 95 and five minutes from the Florida Turnpike by car. Nearby is Downtown at the Gardens, a new commercial center that is larger, more conveniently located to The Isles, and more successful than Abacoa's Town Center. It contains shops, restaurants, entertainment venues, and a high-end, national-chain grocery store. The Isles is in the Palm Beach Gardens School District, which is rated as "very good" but is not ranked as highly as the school system in Jupiter.

Home Characteristics

The Isles was developed by the same homebuilder as Abacoa and uses the same concrete block construction as in Abacoa. The roofs, however, are barrel tile rather than composite shingle. Most of the units are waterfront homes that overlook one of the community's eight lakes. There are three floor plans available in The Isles, the smallest of which is a two-bedroom, two-bath, attached patio home. The other two floor plans have three and four bedrooms respectively, which is more typical of single-family detached dwellings. All homes are one story and have two-car garages. There are no townhouses in The Isles.

Community Amenities

The community includes a large heated pool, four tennis courts, a fitness center, and a meeting room. The homeowners' association dues range from \$1,800 to \$2,600 annually, depending on the size of the home. Fees include landscaping maintenance of the front and back yards, community security, and basic cable. The community design includes sidewalks that are wider than the standard four- to six-foot width found in most residential developments.

Conventional Suburban Community Description: Egret Landing

Project Summary

Egret Landing is a Mediterranean-style neighborhood on 248 acres. The site contains over 30 acres of manmade lakes. In 1995, development began on the community, which will contain 654 single-family detached homes at build-out. The project is marketed as a "family-oriented" community. Egret Landing is the oldest community of the three in this study. Therefore, it has experienced the highest appreciation rates, since development began in 1995 when prices were low. From 2000 to 2005, according to the broker, the neighborhood has doubled in value.

Location

The community is one mile north of Abacoa. Its residents can access both Interstate 95 and the Florida Turnpike as easily as can residents of Abacoa. Commercial amenities and beaches are just six minutes away. Egret Landing is in the Jupiter School District, which is A-rated.

Home Characteristics

A variety of builders worked in Egret Landing and offered a wide selection of floor plans and elevations. The homes in Egret Landing have concrete block construction. Some second floors are wood frame. All of the community's homes have garages for two or three cars and roofs that are barrel or "S" tile. Streets are organized in cul-de-sacs. There are no townhouses offered at Egret Landing.

Community Amenities

The amenities in Egret Landing include a pool, a clubhouse, a basketball court, tennis courts, a fitness room, and a media center. At the time this study was conducted in 2005, the homeowners' association charged \$900 annually. The fees include all lawn maintenance and club facilities.

Resale Performance Comparison: Abacoa, The Isles, and Egret Landing

The chart that follows provides summary information of the data gathered for this study. The Isles and Egret Landing both had a higher CAGR of sales price per square foot during the time period studied than Abacoa. While Abacoa experienced a 10 percent annual increase in price per square foot, The Isles and Egret Landing achieved 16 percent and 15 percent yearly increases, respectively. The communities had a good number of records, making the conclusion reliable. A total of 156 previously owned single-family homes were sold in Abacoa from the beginning of 2001 through the end of 2004. In The Isles, 60 single-family homes were sold in 2002 through 2004, including several attached patio homes.¹⁹ Egret Landing contained 183 resold homes in 2001 through 2004. When averaged, the home sizes in Abacoa were slightly larger than The Isles and slightly smaller than Egret Landing. The smart growth community had smaller lots. Egret Landing had significantly lower homeowners' association fees. The homes in Abacoa were younger than homes in Egret Landing but somewhat older than those in The Isles. Therefore, the top performers are the two conventional suburban communities.

Top Performer: Conventional suburban developments

¹⁹ For The Isles, data were not available for 2001, which means all conclusions on the community are drawn from data in only three years.

**SMART GROWTH SF HOMES
ABACOIA**

| | 2001 (N = 17) | | | 2002 (N = 25) | | | 2003 (N = 49) | | | 2004 (N = 65) | | |
|------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$307,635 | \$222,800 | \$415,000 | \$338,528 | \$220,000 | \$519,000 | \$344,684 | \$235,000 | \$550,000 | \$412,802 | \$245,000 | \$625,000 |
| Living Area in SF | 2,251 | 1,720 | 2,704 | 2,351 | 1,410 | 3,495 | 2,160 | 1,294 | 3,495 | 2,313 | 1,294 | 3,495 |
| Lot Size in Square Feet | 7,410 | \$5,227 | \$8,712 | 7,329 | 5,227 | 9,563 | 7,423 | 5,663 | 10,890 | 7,405 | 7,405 | 7,405 |
| Year Built | 2000 | 1999 | 2001 | 1999 | 1998 | 2001 | 2000 | 1998 | 2001 | 2000 | 1998 | 2002 |
| Age of Home when sold | 1 | 0 | 2 | 3 | 1 | 4 | 3 | 2 | 5 | 4 | 2 | 6 |
| Annual Property Tax Amount | \$4,037 | \$709 | \$6,541 | \$5,078 | \$1,040 | \$7,922 | \$5,114 | \$1,040 | \$8,653 | \$5,803 | \$1,157 | \$9,051 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$1,596 | \$520 | \$1,908 | \$1,805 | \$1,340 | \$1,948 | \$1,907 | \$648 | \$2,188 | \$2,051 | \$1,812 | \$2,340 |
| PRICE PER SQUARE FOOT | \$138 | \$116 | \$195 | \$145 | \$118 | \$193 | \$161 | \$131 | \$205 | \$181 | \$144 | \$255 |
| WEIGHTED AVG PRICE PER SQ FT | \$137 | | | \$144 | | | \$160 | | | \$178 | | |
| MEDIAN PRICE PER SQ FT | \$136 | | | \$139 | | | \$157 | | | \$173 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 5% | 11% | 12% | 31% | 10% |
| % change of weighted avg price/sq ft | 5% | 11% | 12% | 31% | 9% |
| % change of median price/sq ft | 2% | 13% | 10% | 28% | 8% |
| % change of sales prices | 10% | 2% | 20% | 34% | 10% |

**CONVENTIONAL SF HOMES
THE ISLES**

| | 2001 (N = 0) | | | 2002 (N = 2) | | | 2003 (N = 35) | | | 2004 (N = 23) | | |
|------------------------------|--------------|---------|---------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | n/a | n/a | n/a | \$323,500 | \$285,000 | \$362,000 | \$306,768 | \$237,500 | \$435,000 | \$377,239 | \$272,500 | \$510,000 |
| Living Area in SF | n/a | n/a | n/a | 2,251 | 1,995 | 2,507 | 1,830 | 1,520 | 2,507 | 1,943 | 1,520 | 2,507 |
| Lot Size in Square Feet | n/a | n/a | n/a | 7,800 | 7,800 | 7,800 | 6,000 | 6,000 | 6,000 | 9,889 | 7,581 | 12,197 |
| Year Built | n/a | n/a | n/a | 2002 | 2002 | 2002 | 2002 | 2002 | 2003 | 2002 | 2001 | 2003 |
| Age of Home when sold | n/a | n/a | n/a | 0 | 0 | 0 | 1 | - | 1 | 2 | 1 | 3 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | \$1,366 | \$698 | \$3,992 | \$3,776 | \$568 | \$5,683 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | \$1,896 | \$1,884 | \$1,908 | \$1,837 | \$1,604 | \$2,100 | \$1,953 | \$1,764 | \$2,220 |
| PRICE PER SQUARE FOOT | n/a | n/a | n/a | \$144 | \$143 | \$144 | \$168 | \$143 | \$186 | \$194 | \$176 | \$225 |
| WEIGHTED AVG PRICE PER SQ FT | n/a | | | \$144 | | | \$168 | | | \$194 | | |
| MEDIAN PRICE PER SQ FT | n/a | | | \$144 | | | \$170 | | | \$194 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | n/a | 17% | 16% | n/a | 16% |
| % change of weighted avg price/sq ft | n/a | 17% | 16% | n/a | 16% |
| % change of median price/sq ft | n/a | 18% | 14% | n/a | 16% |
| % change of sales prices | n/a | -5% | 23% | n/a | 8% |

**CONVENTIONAL SF HOMES
EGRET LANDING**

| | 2001 (N = 44) | | | 2002 (N = 55) | | | 2003 (N = 40) | | | 2004 (N = 44) | | |
|------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$296,577 | \$199,000 | \$412,000 | \$342,919 | \$210,000 | \$525,000 | \$392,706 | \$290,000 | \$500,000 | \$458,011 | \$330,000 | \$590,000 |
| Living Area in SF | 2,563 | 1,750 | 3,424 | 2,638 | 1,751 | 4,013 | 2,716 | 1,815 | 3,863 | 2,689 | 1,792 | 3,499 |
| Lot Size in Square Feet | 9,562 | 7,405 | 19,602 | 10,409 | 7,840 | 20,000 | 10,203 | 7,405 | 15,246 | 9,556 | 1,307 | 13,504 |
| Year Built | 1998 | 1995 | 2000 | 1998 | 1994 | 2002 | 1999 | 1995 | 2002 | 1999 | 1994 | 2003 |
| Age of Home when sold | 3 | 1 | 6 | 4 | 0 | 8 | 4 | 1 | 8 | 5 | 1 | 10 |
| Annual Property Tax Amount | \$4,231 | \$1,640 | \$6,911 | \$5,292 | \$1,768 | \$7,647 | \$5,756 | \$2,242 | \$8,557 | \$5,622 | \$1,968 | \$7,278 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$1,045 | \$620 | \$1,516 | \$1,098 | \$740 | \$1,300 | \$1,101 | \$1,100 | \$1,140 | \$1,100 | \$1,100 | \$1,100 |
| PRICE PER SQUARE FOOT | \$117 | \$100 | \$153 | \$131 | \$104 | \$175 | \$147 | \$118 | \$179 | \$172 | \$134 | \$234 |
| WEIGHTED AVG PRICE PER SQ FT | \$116 | | | \$130 | | | \$145 | | | \$170 | | |
| MEDIAN PRICE PER SQ FT | \$115 | | | \$130 | | | \$146 | | | \$171 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 12% | 12% | 17% | 48% | 15% |
| % change of weighted avg price/sq ft | 12% | 11% | 18% | 47% | 14% |
| % change of median price/sq ft | 13% | 12% | 17% | 48% | 14% |
| % change of sales prices | 16% | 15% | 17% | 54% | 16% |

Case Study 2: Afton Village

Afton Village is a relatively young smart growth community in Concord, North Carolina. It did not have any residential resales before 2003. To generate sufficient data about price per square foot of houses in the community, resales in Afton Village and its comparable community were pulled for consecutive years beginning in 2003 and ending in 2005. To obtain MLS records and qualitative data, a real estate broker with extensive local knowledge was hired. Afton Village is a mixed-use neighborhood that has more townhouses than single-family detached dwellings. One community was deemed appropriately comparable for the case study evaluation: Laurel Park. Laurel Park is one mile from Afton Village and contains only single-family detached houses. There are no nearby comparable communities for townhouses. Another mixed-use community was breaking ground in early 2006 but was too young to compare to Afton Village. Consequently, only single-family detached houses were considered in this case study.

Project Websites

Afton Village: <http://www.aftonvillage.com/>

Laurel Park: <http://www.niblockhomes.com/default.aspx?niblock=26&objId=14>

Smart Growth Community Description: Afton Village

Project Summary

Afton Village is a smart growth community of 180 acres outside of Charlotte, North Carolina, with office space, 150,000 square feet of retail, 525 residential units, schools, and recreational amenities. Afton Village contains a variety of dwelling types, including single-family detached homes, duplexes, cottages, lofts, townhouses, apartments, and live/work units. The first single-family detached homes were constructed in 1999.

Location

Afton Village is adjacent to Interstate 85, approximately seven miles from the center of Concord and 20 miles from downtown Charlotte. Afton Village's school-aged residents have access to Cabarrus County elementary, middle, and high schools, which are considered desirable when compared with other regional public schools.

Home Characteristics

The residences in Afton Village are constructed by numerous custom builders, but the community's homes all have certain unifying characteristics. The houses were designed with historical southeastern residences in mind and have either brick or long-lasting fiber-cement siding façades. All roofs are constructed of architectural shingles. The single-family detached dwellings in the community have two-car garages, which are accessed through rear alleys. Most of Afton Village's houses have front porches that are eight feet deep, enough for homeowners to use them as functioning outdoor rooms.

Community Amenities

Afton Village's Main Street is walking distance from most of the community's houses. The Main Street includes a supermarket, library, post office, bakery, dentist's office, and other retail establishments. Afton Village's residents have access to a community pool, tennis court, and park within walking distance of their homes. The community also contains a new YMCA, although membership fees must be paid in addition to homeowners' association dues. Community design principles incorporate sidewalks throughout the neighborhood that are wider than the typical four- to six-foot-wide sidewalks.

Conventional Suburban Community Description: Laurel Park

Project Summary

Laurel Park is one mile from Afton Village. The community's first homes were constructed in 2001. It is not a mixed-use community and includes only single-family detached residences. Some homes, called patio homes, are single story. The patio homes are considered competitive with small single-family detached dwellings because both unit types do not share any common walls.

Location

The community is near Interstate 85, off the same exit as Afton Village. It is also 20 miles from downtown Charlotte and approximately seven miles from Concord. Laurel Park is very close to the supermarket and the other amenities along Main Street in Afton Village, but those amenities are not easy to access on foot from Laurel Park. Laurel Park's school-aged residents attend the same desirable Cabarrus County elementary, middle, and high schools as Afton Village's children.

Home Characteristics

Laurel Park's homes use a typical suburban site layout, with each home having a street-facing, two-car garage. The lots for homes in Laurel Park are slightly larger than those on which single-family detached units sit in Afton Village. The community is considered comparable in terms of construction quality, although construction materials differ for siding and roofing. Many homes have shutters, and some contain porches.

Community Amenities

The community has a playground and two swim and tennis clubs. Laurel Park also has a scenic pond with a pavilion, which serves as a community focal point. Laurel Park residents also use the YMCA at Afton Village.

Resale Performance Comparison: Afton Village and Laurel Park

In 2003, 2004, and 2005, Afton Village had 11 resales, with three homes resold in the first year of investigation, four in the second, and four in the third. Laurel Park had 13 resales in the same time frame, two in 2003, two in 2004, and nine in 2005. The data indicate that Afton Village's resold single-family detached dwellings had a CAGR of 0 percent, while the CAGR of homes in Laurel Park was -2 percent. There are too few records to determine a top performer between the two communities. Investigation in future years may reveal more records from which conclusions can be drawn.

Top Performer: None. The number of resales in both communities is insufficient to draw a conclusion.

**SMART GROWTH SFD HOMES
AFTON VILLAGE**

| | 2003 (N = 3) | | | 2004 (N = 4) | | | 2005 (N = 4) | | |
|------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$227,000 | \$192,500 | \$270,000 | \$256,875 | \$228,500 | \$321,000 | \$210,125 | \$165,000 | \$247,500 |
| Living Area in SF | 2,197 | 1,723 | 2,783 | 2,433 | 1,983 | 3,628 | 2,020 | 1,533 | 2,462 |
| Lot Size in Square Feet | 5,953 | 5,227 | 6,969 | 7,034 | 5,487 | 9,583 | n/a | n/a | n/a |
| Year Built | 1999 | 1999 | 2000 | 2000 | 1999 | 2001 | 2000 | 1999 | 2001 |
| Age of Home when sold | 4 | 3 | 4 | 4 | 3 | 5 | 6 | 4 | 6 |
| Annual Property Tax Amount | n/a | n/a | n/a | #DIV/0! | \$0 | \$0 | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$240 | \$240 | \$240 | \$240 | \$240 | \$240 | \$405 | \$240 | \$900 |
| PRICE PER SQUARE FOOT | \$105 | \$97 | \$112 | \$109 | \$88 | \$118 | \$105 | \$85 | \$119 |
| WEIGHTED AVG PRICE PER SQ FT | \$103 | | | \$106 | | | \$104 | | |
| MEDIAN PRICE PER SQ FT | \$105 | | | \$114 | | | \$107 | | |

| | 2003-2004 | 2004-2005 | 2003-2005 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 4% | -4% | 0% | 0% |
| % change of weighted avg price/sq ft | 2% | -1% | 1% | 0% |
| % change of median price/sq ft | 9% | -6% | 2% | 1% |
| % change of sales prices | 13% | -18% | -7% | -4% |

**CONVENTIONAL SFD HOMES
LAUREL PARK**

| | 2003 (N = 2) | | | 2004 (N = 2) | | | 2005 (N = 9) | | |
|------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$229,950 | \$224,900 | \$235,000 | \$326,355 | \$223,000 | \$429,709 | \$281,378 | \$191,000 | \$430,000 |
| Living Area in SF | 2,455 | 2,440 | 2,469 | 3,326 | 2,716 | 3,936 | 3,079 | 2,227 | 4,006 |
| Lot Size in Square Feet | 7,187 | 6,534 | 7,840 | 13,503 | 7,840 | 19,166 | 11,761 | 6,098 | 21,780 |
| Year Built | 2002 | 2002 | 2002 | 2003 | 2002 | 2004 | 2002 | 2001 | 2004 |
| Age of Home when sold | 1 | 1 | 1 | 1 | 0 | 2 | 3 | 1 | 4 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$118 | \$118 | \$118 | \$900 | \$900 | \$900 | \$451 | \$450 | \$456 |
| PRICE PER SQUARE FOOT | \$94 | \$91 | \$96 | \$96 | \$82 | \$109 | \$90 | \$74 | \$107 |
| WEIGHTED AVG PRICE PER SQ FT | \$94 | | | \$98 | | | \$91 | | |
| MEDIAN PRICE PER SQ FT | \$94 | | | \$96 | | | \$90 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 2% | -6% | -4% | -2% |
| % change of weighted avg price/sq ft | 5% | -7% | -2% | -1% |
| % change of median price/sq ft | 2% | -6% | -4% | -2% |
| % change of sales prices | 42% | -14% | 22% | 11% |

Case Study 3: Amelia Park

Amelia Park is an award-winning, master-planned greenfield development in Fernandina Beach, Florida. Breakers at Ocean Reach is a development of single-family detached dwellings that was selected as an appropriate market comparable. Its homes were built beginning in 1997 and are comparably sized. Although Amelia Park includes townhouses and other attached dwellings, the surrounding area lacked a comparable community with townhouses. Therefore, only single-family detached houses were measured in this study. The necessary MLS data came from a Florida-based company specializing in real estate market information. When selecting the comparable community, local brokers with extensive local experience were consulted.

Project Websites

Amelia Park: <http://www.ameliapark.com/>

Breakers at Ocean Reach: No website found.

Smart Growth Community Description: Amelia Park

Project Summary

Amelia Park is a mixed-use community of 100 acres. The project's lead designer is a national leader in traditional neighborhood developments. A local homebuilder was responsible for the community's residential units. Construction on the community began in 1998. The community includes offices, retail, residences, schools, and recreational amenities. Amelia Park's 400 homes include different types of residences, such as custom homes, bungalows, and townhouses.

Location

Amelia Park is approximately 35 miles northeast of Jacksonville, Florida, just one mile from the Atlantic Ocean. The closest major interstate is Interstate 95, which is 15 miles from the development. Amelia Park is served by the Amelia Island School District.

Home Characteristics

Amelia Park's homes are different from many conventional suburban homes because the community allows and even encourages certain commonly discouraged home modifications. For instance, residents are allowed to build apartments and home offices above their garages to encourage neighborhood diversity. Properties inhabited by owners and tenants are intermixed throughout the community. The homes also have front porches that are deep enough to be used as outdoor rooms and garages that are accessed through rear alleys. Most homes have siding and shutters.

Community Amenities

Amelia Park's Town Center, which contains more than 50,000 square feet of commercial space, a multi-purpose meeting hall, and several office and civic buildings, is walking distance from the community's homes and a five-minute walk from the community's geographical center. Some of the community's amenities include sidewalks, gridded streets, and pedestrian walkways. Within walking distance of most homes are Amelia Park's new YMCA, an eight-acre lake with recreational uses, and a Montessori school that educates students from kindergarten through fifth grade.

Conventional Suburban Community Description: Breakers at Ocean Reach

Project Summary

Breakers is one of two subdivisions in Ocean Reach and contains more expensive homes than the other subdivision. It is a conventional suburban community that was constructed beginning in 1997. It contains only single-family homes.

Location

The community is approximately one mile from the Amelia Park development, 35 miles northeast of Jacksonville, and less than one mile from the Atlantic Ocean. Interstate 95, approximately 15 miles away, is the closest major highway. Several office and retail shopping centers are within two miles of the development. The community is not within walking distance of these amenities. The community's school-aged residents attend Amelia Island schools.

Home Characteristics

The homes in Breakers at Ocean Reach are typical suburban dwellings. Most are stucco and include front-facing, two-car garages. Some homes have screened-in pools, and lot sizes are large enough to accommodate such an amenity behind virtually every home. The homebuilder is one of the largest in the nation, with more than 50 years of construction experience.

Community Amenities

The community is built around a lake, similar to Amelia Park. Most homes are on curvilinear streets or cul-de-sacs. Some streets have sidewalks and some do not. There are no recreational amenities in the community. The new YMCA at Amelia Park is considered a draw for Breakers residents, as it is a very short drive away.

Resale Performance Comparison: Amelia Park and Breakers at Ocean Reach

Both communities have healthy appreciation rates. Amelia Park's price per square foot CAGR between 2001 and 2004 was 10 percent, slightly less than the 11 percent CAGR achieved by homes in Breakers at Ocean Reach. The communities' resale numbers were modest. From 2001 through 2004, there were 47 single-family detached homes resold in Amelia Park and 28 in Breakers at Ocean Reach. The square footages of homes in Amelia Park were similar to those in Breakers on average, but the homes in Amelia Park had much greater variability in size of interior space. The homes in Breakers were slightly older on average than those in the smart growth community. Since data had to be obtained from a private company, numbers on lot sizes and homeowners' association fees were not available. Qualitative evidence gathered from brokers indicates that lot sizes tend to be smaller in Amelia Park. Their nearly identical annual appreciation rates reveal that Breakers at Ocean Reach outperformed the smart growth counterpart by a very slim margin.

Top Performer: Conventional suburban development

**SMART GROWTH SFD HOMES
AMELIA PARK**

| | 2001 (N = 9) | | | 2002 (N = 7) | | | 2003 (N = 18) | | | 2004 (N = 13) | | |
|--|--------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$274,811 | \$157,500 | \$390,000 | \$243,500 | \$175,500 | \$409,000 | \$251,839 | \$136,800 | \$425,000 | \$289,338 | \$209,000 | \$400,000 |
| Square Footage (Effective Adjusted) | 2,993 | 1,887 | 4,605 | 2,282 | 1,887 | 3,680 | 2,287 | 1,589 | 3,680 | 2,386 | 1,709 | 2,918 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1999 | 1999 | 2000 | 1999 | 1999 | 2000 | 2001 | 1999 | 2003 | 2001 | 1999 | 2004 |
| Age of Home when sold | 2 | 1 | 2 | 3 | 2 | 3 | 2 | 0 | 4 | 3 | 0 | 5 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | \$91 | \$79 | \$99 | \$105 | \$93 | \$123 | \$110 | \$59 | \$129 | \$122 | \$92 | \$148 |
| WEIGHTED AVG PRICE PER SQ FT | \$103 | | | \$107 | | | \$110 | | | \$121 | | |
| MEDIAN PRICE PER SQ FT | \$94 | | | \$103 | | | \$113 | | | \$119 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 16% | 5% | 11% | 34% | 10% |
| % change of weighted avg price/sq ft | 3% | 3% | 10% | 17% | 5% |
| % change of median price/sq ft | 10% | 10% | 6% | 27% | 8% |
| % change of sales prices | -11% | 3% | 15% | 5% | 2% |

**CONVENTIONAL SFD HOMES
BREAKERS AT OCEAN REACH**

| | 2001 (N = 7) | | | 2002 (N = 4) | | | 2003 (N = 10) | | | 2004 (N = 7) | | |
|---|--------------|----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$223,314 | \$76,400 | \$271,000 | \$247,250 | \$235,000 | \$270,000 | \$281,900 | \$235,000 | \$325,000 | \$307,357 | \$262,000 | \$377,500 |
| Living Area in SF (Effective Adjusted) | 2,623 | 2,304 | 2,967 | 2,682 | 2,308 | 2,930 | 2,631 | 2,276 | 2,877 | 2,580 | 2,304 | 2,789 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1998 | 1997 | 1999 | 1998 | 1997 | 1998 | 1997 | 1997 | 1998 | 1998 | 1997 | 1999 |
| Age of Home when sold | 3 | 2 | 4 | 4 | 4 | 5 | 6 | 5 | 6 | 5 | 4 | 6 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | \$87 | \$26 | \$105 | \$93 | \$82 | \$102 | \$107 | \$96 | \$119 | \$119 | \$103 | \$149 |
| WEIGHTED AVG PRICE PER SQ FT | \$85 | | | \$92 | | | \$107 | | | \$119 | | |
| MEDIAN PRICE PER SQ FT | \$95 | | | \$94 | | | \$106 | | | \$114 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 7% | 15% | 11% | 38% | 11% |
| % change of weighted avg price/sq ft | 8% | 16% | 11% | 40% | 12% |
| % change of median price/sq ft | -1% | 13% | 7% | 20% | 6% |
| % change of sales prices | 11% | 14% | 9% | 38% | 11% |

Case Study 4: Belmont Bay

Belmont Bay is located in Woodbridge, Virginia. It is an unusual development because it contains both a smart growth neighborhood and a conventional suburban neighborhood. The development's first phase is a residential area that was designed using conventional suburban development standards. Construction was completed on the first dwellings as early as 1995. The second phase of development is the smart growth neighborhood, which was planned as a mixed-use neighborhood using smart growth design techniques. The smart growth neighborhood had its first homes constructed in 2000 and its first resales in 2002. Resales from 2002, 2003, and 2004 were analyzed for this case study. The homes in both phases are predominantly townhouses, so the comparison looks only at townhouses. To obtain MLS data and qualitative data about the community, a broker specializing in Belmont Bay was selected. Because the two neighborhoods make up the same development, the community description covers both projects, except where differences between the smart growth neighborhood and the conventional suburban arise.

Project Website

Belmont Bay: <http://www.belmontbay.com/>

Community Description: Belmont Bay, Smart Growth and Conventional Suburban Phases

Project Summary

Belmont Bay is a 352-acre community that was still being constructed when the resale analysis was completed in 2005. The first phase of construction, which includes the townhouses of the conventional suburban development neighborhood, comprises 120 acres. The smart growth phase is 75 acres, with the remaining 130 acres set aside for parks and open space, an 18-hole golf course, and the Occoquan Bay National Wildlife Refuge. Belmont Bay fronts the Occoquan River. The smart growth neighborhood fronts Belmont Bay Harbor, a 158-slip marina, which will anchor the neighborhood's planned town center.

Location

Belmont Bay is approximately 20 miles southwest of Washington, D.C., in Woodbridge, Virginia. The two neighborhoods in Belmont Bay are served by the same schools, and Belmont Elementary School is equidistant from both neighborhoods. The Belmont Bay community is within a few blocks of shopping, offices, and bus transportation. The Virginia Rail Express (VRE) has a stop close to the community. The conventional suburban development phase area is six blocks from the VRE station, and the smart growth phase area is one mile away.

Home Characteristics

Many of the homes in the conventional suburban neighborhood have views of the river and the golf course but have no direct access to the river. The conventional neighborhood also contains many higher-end single-family detached homes, which were not included in the comparison because the smart growth community contains predominantly townhouses and condominiums. The smart growth community's townhouses tend to have more open floor plans but smaller square footages than the conventional suburban development homes. The exteriors of the units stand out, as owners may choose from a variety of brick color choices. Windows run three across and have non-working shutters. Gabled roofs with dormer windows and tarpaper shingle roofs are standard. Townhouses front the sidewalks and are close to the streets. Parking is in rear alleys and typically garaged. Some streets apply a stamped brick paver instead of poured asphalt. On-street parking is common in the smart growth neighborhood. Narrow streets and small blocks make this a very walkable neighborhood.

The townhouses in the conventional suburban neighborhood have less variety of brickwork, and the doors and windows are not symmetrically organized to the façade. Units tend to be set back from the street and provide front-loaded automobile access. The neighborhood has sidewalks, although the streets are wider and follow a cul-de-sac pattern.

Community Amenities

The two neighborhoods of Belmont Bay have very different amenities and consequently serve different demographic groups and lifestyles. The conventional suburban development portion of Belmont Bay has a swimming pool, tennis courts, and a tot lot and has limited access to the river and marina. The smart growth neighborhood has easy access to the marina and riverfront. It also has an 18-hole golf course. The community's restaurant and the area in which the developer is planning to have retail storefronts are walking distance from homes in the smart growth community. Both communities receive snow clearing, trash removal, landscaping, and professional management through the homeowners' association.

Resale Performance Comparison: Two Neighborhoods in Belmont Bay

The average price per square foot of homes in the conventional suburban neighborhood of Belmont Bay appreciated 22 percent annually, a greater CAGR than that of the smart growth neighborhood, which was 18 percent. The fact that the homes are in the exact same location speaks to their comparability. Yet there were few resales within the smart growth area in 2002 and 2003, increasing the odds that a different picture of annual growth rates may emerge if there are more resales in future years. In the conventional suburban neighborhood, 76 homes were sold in 2002, 2003, and 2004. In the same years, just 41 homes were sold in the smart growth neighborhood, and about half of those sales were in 2004. In the smart growth neighborhood, the average home size was slightly larger and sales prices were generally higher. The analysis determined that the conventional suburban development neighborhood is the top performer in this comparison.

Top Performer: Conventional suburban development phase in Belmont Bay

**SMART GROWTH TOWNHOUSES
BELMONT BAY**

| | 2002 (N = 7) | | 2003 (N = 7) | | 2004 (N = 27) | |
|------------------------------|--------------|-----------------------|--------------|-----------------------|---------------|-----------------------|
| | Average | Range | Average | Range | Average | Range |
| Sales Price | \$340,331 | \$290,920 - \$384,000 | \$397,557 | \$350,000 - \$422,000 | \$471,748 | \$365,000 - \$545,000 |
| Living Area in SF | 2,255 | 1,804 - 2,660 | 2,701 | 1,786 - 3,328 | 2,247 | 1,728 - 3,328 |
| Lot Size in Square Feet | 1,948 | 1,481 - 2,195 | 2,538 | 2,195 - 3,171 | 2,238 | 1,372 - 3,746 |
| Year Built | 2001 | 2000 - 2002 | 2002 | 2001 - 2002 | 2002 | 2001 - 2004 |
| Age of Home when sold | 1 | 0.5 - 2 | 1 | 1 - 2 | 2 | 0.5 - 3 |
| Annual Property Tax Amount | \$4,215 | \$3,905 - \$4,486 | \$4,636 | \$4,042 - \$5,223 | \$4,315 | \$3,736 - \$5,306 |
| County/State | \$3,960 | \$3,669 - \$4,215 | \$4,356 | \$3,797 - \$4,908 | \$4,054 | \$3,510 - \$4,986 |
| Special Assessments | \$255 | \$236 - \$271 | \$280 | \$244 - \$315 | \$261 | \$226 - \$321 |
| Annual HOA Fees | \$641 | \$432 - \$744 | \$690 | \$660 - \$720 | \$661 | \$600 - \$720 |
| PRICE PER SQUARE FOOT | \$154 | \$132 - \$179 | \$151 | \$122 - \$196 | \$215 | \$140 - \$260 |
| WEIGHTED AVG PRICE PER SQ FT | \$151 | | \$147 | | \$210 | |
| MEDIAN PRICE PER SQ FT | \$149 | | \$153 | | \$213 | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|-------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | -2% | 42% | 40% | 18% |
| % change of weighted avg price/sqft | -2% | 43% | 39% | 18% |
| % change of median price/sqft | 2% | 40% | 43% | 19% |
| % change of sales prices | 17% | 19% | 39% | 18% |

**CONVENTIONAL TOWNHOUSES
BELMONT BAY**

| | 2002 (N = 18) | | 2003 (N = 25) | | 2004 (N = 33) | |
|------------------------------|---------------|-----------------------|---------------|-----------------------|---------------|-----------------------|
| | Average | Range | Average | Range | Average | Range |
| Sales Price | \$273,917 | \$235,000 - \$330,000 | \$307,700 | \$256,000 - \$350,000 | \$387,445 | \$329,900 - \$455,000 |
| Living Area in SF | 1,836 | 1,600 - 2,880 | 1,773 | 1,600 - 1,984 | 1,741 | 1,440 - 1,986 |
| Lot Size in Square Feet | 2,222 | 1,599 - 2,910 | 2,089 | 1,599 - 3,180 | 2,074 | 1,599 - 3,036 |
| Year Built | 1998 | 1996 - 2001 | 1998 | 1995 - 2001 | 1999 | 1995 - 2001 |
| Age of Home when sold | 4 | 1 - 6 | 5 | 2 - 8 | 5 | 3 - 9 |
| Annual Property Tax Amount | \$3,762 | \$3,364 - \$4,622 | \$3,683 | \$3,328 - \$3,960 | \$3,654 | \$3,300 - \$4,028 |
| County/State | \$3,534 | \$3,160 - \$4,343 | \$3,461 | \$3,127 - \$3,721 | \$3,434 | \$3,100 - \$3,785 |
| Special Assessments | \$227 | \$203 - \$279 | \$222 | \$201 - \$239 | \$221 | \$199 - \$243 |
| Annual HOA Fees | \$578 | \$372 - \$792 | \$691 | \$432 - \$960 | \$711 | \$660 - \$732 |
| PRICE PER SQUARE FOOT | \$151 | \$111 - \$173 | \$174 | \$159 - \$195 | \$224 | \$176 - \$268 |
| WEIGHTED AVG PRICE PER SQ FT | \$149 | | \$174 | | \$222 | |
| MEDIAN PRICE PER SQ FT | \$149 | | \$176 | | \$222 | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|-------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 15% | 29% | 48% | 22% |
| % change of weighted avg price/sqft | 16% | 28% | 49% | 22% |
| % change of median price/sqft | 18% | 26% | 49% | 22% |
| % change of sales prices | 12% | 26% | 41% | 19% |

Case Study 5: Birkdale Village

Birkdale Village is a smart growth development in Huntersville, North Carolina, a rapidly growing suburb of Charlotte. Hampton Ridge, also in Huntersville, was selected as the conventional suburban community to compare with Birkdale Village. The first residential units in Birkdale Village were completed in 1999, while dwellings in Hampton Ridge were constructed as early as 1996. The only housing for sale that is common to both communities is single-family detached houses, although Birkdale also includes rental apartments.

Project Websites

Birkdale Village: <http://www.birkdalevillage.net/>

Hampton Ridge: <http://hampton-ridge.com/>

Smart Growth Community Description: Birkdale Village

Project Summary

Birkdale Village is a 52-acre development outside of Charlotte, North Carolina, designed using smart growth principles. It is pedestrian-oriented and has a grid street system. It has a mix of uses and includes parks and open spaces and a town center with 360,000 square feet of commercial space, structured parking facilities, and several hundred apartments above the retail storefronts. The retail space in the community includes a mix of national chains and local retailers and is frequented by residents of the surrounding communities in the northern portion of Mecklenburg County, North Carolina. According to a project synopsis generated by the Urban Land Institute, the community was achieving residential, retail, and office rents that were significantly above market averages in 2005.²⁰

Location

Birkdale Village is approximately 15 miles north of Charlotte. The community is five minutes west of Interstate 77 by car. It is five minutes away from Lake Norman, a state park with boating, camping, fishing, swimming, and hiking. The recreational areas of Blyth Landing and Jetton Park, as well as two grocery stores, are also a five-minute drive from Birkdale Village. The community is three minutes from the Birkdale Health Club and 35 minutes from the airport. Torrence Creek Elementary, Badley Middle, and Hopewell High schools service the community and are approximately seven, nine, and thirteen minutes from the town center, respectively. The high school is considered to be of very good quality. The elementary and middle schools are good.

Home Characteristics

Although there are approximately 120 townhouses in Birkdale Village, the comparison focused on the single-family detached housing, of which there are about 350 units. The single-family homes in Birkdale Village have fiber cement siding and front porches. Home styles include one-story bungalows and two-story, traditionally styled homes. Some houses have detached two-car garages while others have attached two-car garages. The garages are typically behind the residences with alley access.

Community Amenities

Birkdale Village's residents have access to a swimming pool, tennis courts, and walking trails. In addition, most homes are within walking distance of the amenities of the town center, including shopping, restaurants, and a 16-screen movie theater.

²⁰ Development Case Studies Database. "Birkdale Village." Urban Land Institute. <http://casestudies.uli.org/>. Accessed April 3, 2007.

Conventional Suburban Community Description: Hampton Ridge

Project Summary

Hampton Ridge has 237 single-family detached homes in a conventional suburban development community that was developed by four major builders (one national production builder and three local builders). The community was nearing build-out during the time of this study in 2005.

Location

Hampton Ridge is accessed from the same exit as Birkdale Village off of Interstate 77 and is approximately one mile east of the highway. According to the broker, one major drawback of the community is that there are only two entrances, both of which are on a major road. Approximately five minutes away by car is a shopping center anchored by national big-box tenants and a grocery store, with a few restaurants, a bank, and a gas station. Lake Norman is approximately 15 minutes away, and the airport is about 35 minutes away. The website for Hampton Ridge includes movie listings at the Birkdale Village cinema, indicating that residents travel there for entertainment. Hampton Ridge is in the same school district as Birkdale Village and is approximately the same distance from the schools.

Home Characteristics

The homes in Hampton Ridge are typical suburban single-family detached dwellings of two stories with attached two-car garages. They have vinyl siding, although some homes have brick façades. Hampton Ridge's houses generally do not have front porches.

Community Amenities

The community includes a swimming pool and two walking trails. The neighboring development has a tennis court, which Hampton Ridge residents use.

Resale Performance Comparison: Birkdale Village and Hampton Ridge

Birkdale Village had a higher CAGR of sales price per square foot during the time periods studied than its conventional suburban comparable. Birkdale Village saw prices per square foot increase at a rate of 5 percent per year, while in Hampton Ridge, prices per square foot rose 2 percent per year. The communities had an ample number of records to draw a conclusion; Birkdale Village had 92 homes resold from 2001 through 2004, while Hampton Ridge had 65 resales in the same years. On average, the homes in Birkdale Village were smaller and had lots that were approximately half the size of those found in Hampton Ridge. By 2004, the average price per square foot in the smart growth community was \$119, while in the conventional suburban development community, the average price was \$86 per square foot. The houses in Hampton Ridge were a few years older than those in Birkdale Village. Overall, the qualities of the two communities made them comparable.

Top Performer: Smart growth community

**SMART GROWTH SFD HOMES
BIRKDALE VILLAGE**

| | 2001 (N = 2) | | | 2002 (N = 11) | | | 2003 (N = 36) | | | 2004 (N = 43) | | |
|------------------------------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$167,500 | \$140,000 | \$195,000 | \$190,720 | \$149,400 | \$217,000 | \$217,365 | \$156,000 | \$318,000 | \$219,038 | \$149,600 | \$284,000 |
| Living Area in SF | 1,639 | 1,287 | 1,990 | 1,871 | 1,405 | 2,300 | 1,953 | 1,288 | 3,120 | 1,884 | 1,298 | 2,735 |
| Lot Size in Square Feet | n/a | n/a | n/a | 7,415 | 4,356 | 15,028 | 7,841 | 3,180 | 17,424 | 6,993 | 3,485 | 19,166 |
| Year Built | 1999 | 1999 | 1999 | 2000 | 1999 | 2001 | 2000 | 1999 | 2002 | 2001 | 1999 | 2003 |
| Age of Home when sold | 2 | 2 | 2 | 2 | 1 | 3 | 3 | 1 | 4 | 3 | 1 | 5 |
| Annual Property Tax Amount | \$2,015 | \$1,657 | \$2,373 | \$2,032 | \$1,751 | \$2,229 | \$2,081 | \$1,642 | \$2,642 | \$1,998 | \$1,556 | \$2,650 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$367 | \$350 | \$384 | \$440 | \$384 | \$648 | \$430 | \$225 | \$480 | \$443 | \$108 | \$496 |
| PRICE PER SQUARE FOOT | \$103 | \$98 | \$109 | \$102 | \$93 | \$118 | \$113 | \$90 | \$128 | \$119 | \$96 | \$143 |
| WEIGHTED AVG PRICE PER SQ FT | \$102 | | | \$102 | | | \$111 | | | \$116 | | |
| MEDIAN PRICE PER SQ FT | \$103 | | | \$101 | | | \$115 | | | \$122 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | -1% | 11% | 5% | 15% | 5% |
| % change of weighted avg price/sq ft | 0% | 9% | 4% | 14% | 4% |
| % change of median price/sq ft | -2% | 14% | 6% | 18% | 6% |
| % change of sales prices | 14% | 14% | 1% | 31% | 9% |

**CONVENTIONAL SFD HOMES
HAMPTON RIDGE**

| | 2001 (N = 15) | | | 2002 (N = 14) | | | 2003 (N = 13) | | | 2004 (N = 23) | | |
|------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$202,747 | \$160,750 | \$259,900 | \$198,246 | \$170,000 | \$225,000 | \$198,046 | \$173,000 | \$226,000 | \$207,839 | \$167,000 | \$244,500 |
| Living Area in SF | 2,513 | 1,885 | 3,137 | 2,516 | 2,065 | 2,973 | 2,444 | 1,750 | 3,068 | 2,447 | 1,758 | 3,053 |
| Lot Size in Square Feet | 12,106 | 8,799 | 20,473 | 11,347 | 9,583 | 13,939 | 12,052 | 9,583 | 19,166 | 12,622 | 7,971 | 24,394 |
| Year Built | 1998 | 1996 | 2000 | 1999 | 1997 | 2001 | 1998 | 1997 | 2000 | 1999 | 1996 | 2003 |
| Age of Home when sold | 3 | 1 | 5 | 4 | 1 | 5 | 5 | 3 | 6 | 92 | 1 | 1998 |
| Annual Property Tax Amount | \$2,196 | \$1,882 | \$2,642 | \$2,177 | \$1,884 | \$2,442 | \$2,172 | \$1,877 | \$2,471 | \$2,202 | \$1,888 | \$2,457 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$332 | \$210 | \$456 | \$328 | \$210 | \$360 | \$347 | \$312 | \$360 | \$350 | \$216 | \$480 |
| PRICE PER SQUARE FOOT | \$81 | \$72 | \$92 | \$79 | \$69 | \$89 | \$82 | \$74 | \$99 | \$86 | \$73 | \$99 |
| WEIGHTED AVG PRICE PER SQ FT | \$81 | | | \$79 | | | \$81 | | | \$85 | | |
| MEDIAN PRICE PER SQ FT | \$80 | | | \$80 | | | \$81 | | | \$85 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | -2% | 4% | 4% | 5% | 2% |
| % change of weighted avg price/sq ft | -2% | 3% | 5% | 5% | 2% |
| % change of median price/sq ft | 0% | 1% | 6% | 7% | 2% |
| % change of sales prices | -2% | 0% | 5% | 3% | 1% |

Case Study 6: Celebration

Celebration is a smart growth development in northern Osceola County, Florida, a part of the Orlando metropolitan area that grew rapidly in the early 2000s. To select a comparable community, access the MLS system, and provide local qualitative information, a broker familiar with the market in and around Celebration was selected. Hunter's Creek, a high-end conventional suburban development project in nearby Windermere, Florida, was selected as the comparable community for the case study. The comparable community is not in Osceola County because of the lack of high-quality residential development occurring in the county and the distinctive nature of the development at Celebration. Despite this difference, they are true market counterparts. Residential units in both communities were completed in 1997. Celebration includes townhouses, although the broker was unable to find a comparable townhouse community. As such, the case study presented below analyzes data on single-family detached home resales in 1998, 2000, 2002, and 2004.

Project Websites

Celebration: <http://www.celebration.fl.us/>

Hunter's Creek: <http://www.hunterscreek.net/>

Smart Growth Community Description: Celebration

Project Summary

Celebration was designed and developed by the Walt Disney Company. It was envisioned as a small southeastern town with a strong sense of community, a mix of uses, and an architectural style common in the 1940s in Florida. The community features several residential neighborhoods, each planned around a public area. At build-out, the development will have approximately 5,000 housing units, including rentals, on 4,900 acres, surrounded by a 4,700-acre protected greenbelt.

Location

Celebration is in Osceola County, approximately 20 miles south of downtown Orlando and just a few miles south of Walt Disney World. It has easy access to shopping, the airport, and regional jobs through Interstate 4 and Toll Road 417. In 2006, the schools servicing Celebration were Celebration K8 School, rated A for elementary and middle schools, and Celebration High School, rated C. The tax rate is slightly lower in Osceola County than in nearby Orange County.

Home Characteristics

Celebration's houses have traditional southeastern exteriors with interiors. The homes have front porches and front yards. Most of the homes have well-lit rear alleyways, which are used for services and garage access. Architectural styles include Victorian, French Colonial, Plantation, Charleston Single, and Spanish Mission Revival.

Community Amenities

Celebration provides a wide variety of amenities for residents. The community boasts five pools, four soccer fields, and a baseball field. It also has natural preserves and walking trails winding through its neighborhoods. Florida Hospital owns and operates a 60-acre health care facility in Celebration, which includes a 60,000-square-foot fitness center open to residents. The Celebration Golf Club is an 18-hole public course with a clubhouse and a youth practice range. In addition, Celebration has an 18-acre town center that is a short walk or bike ride from most homes in the community. It is built around a lake and includes shops, restaurants, a movie theater, offices, apartments, a bank, a post office, and a hotel. Most of the shops are along a wide promenade that ends at the lakefront.

Conventional Suburban Community Description: Hunter's Creek

Project Summary

Hunter's Creek was developed by one of the largest private land developers in the country and is comprised of 3,870 housing units in 45 neighborhoods on 4,000 acres. It was built around a natural creek and includes a 600-acre conservation area.

Location

Hunter's Creek is 12 miles south of downtown Orlando. It is close to Interstate 4 and Toll Road 417, which grant access to stores, the airport, and local employment centers. Three elementary schools, two middle schools, and two high schools cover different sections of Hunter's Creek. The school system that services Hunter's Creek is rated A for elementary and middle schools, which are in the community, and rated C for the high schools, which is a short drive away. The tax rate is slightly higher in Hunter's Creek than in Celebration because Hunter's Creek is in Orange County.

Home Characteristics

Most of the houses in Hunter's Creek include two-car, attached garages facing the street, but the largest homes in the community have garages that accommodate three or more cars. Some homes have screened porches, screened in-ground pools, and irrigation systems. The homes are built with block and stucco, and the roofs are shingled.

Community Amenities

Hunter's Creek contains softball fields; soccer fields; six parks; and courts for basketball, racquetball, tennis, and volleyball. A picnic area and playground also are available for residents. Vista Park, the newest and largest community park, offers more than 20 acres of recreational opportunities, including a bike path. The community is home to the semi-private Hunter's Creek Golf Club, which opened in 1986.

Resale Performance Comparison: Celebration and Hunter's Creek

Celebration and Hunter's Creek had the same CAGR of 6 percent per year between 1998 and 2004. In Celebration, there were 341 resales, and in Hunter's Creek, there were 631 resales. These very large numbers indicate that the conclusions drawn from the data are reliable indicators of the true appreciation over time in the communities. On average, the homes in the two communities were the same age and had nearly identical lot sizes. However, the average square footage of all homes resold in Celebration was larger than the average for Hunter's Creek. This is not unusual, as many case studies reveal comparable or larger square footages in smart growth communities. Additionally, the average home sales price in Celebration in 2004 was more than twice the average in Hunter's Creek in the same year. Accordingly, the prices per square foot tended to be higher in Celebration. Despite these differences, the characteristics of the developments indicate that they are competitive with each other, which may explain their identical appreciation rates.

Top Performer: None. Tie between the conventional suburban and smart growth communities.

**SMART GROWTH SFD HOMES
CELEBRATION**

| | 1998 (N = 2) | | | 2000 (N = 56) | | | 2002 (N = 82) | | | 2004 (N = 201) | | |
|------------------------------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-------------|----------------|-----------|-------------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$272,500 | \$230,000 | \$315,000 | \$366,406 | \$203,500 | \$680,000 | \$413,894 | \$192,000 | \$1,135,000 | \$512,934 | \$249,000 | \$2,650,000 |
| Living Area in SF | 2,494 | 2,494 | 2,494 | 2,679 | 1,604 | 4,506 | 2,826 | 1,244 | 5,650 | 2,838 | 1,289 | 8,100 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | 8,638 | 2,475 | 18,460 | 8,096 | 1,350 | 15,301 |
| Year Built | 1997 | 1997 | 1997 | 1998 | 1996 | 2000 | 1998 | 1996 | 2002 | 2000 | 1996 | 2004 |
| Age of Home when sold | 1 | 1 | 1 | 3 | 0 | 4 | 4 | 0 | 6 | 4 | 0 | 8 |
| Annual Property Tax Amount | \$1,578 | \$956 | \$2,200 | \$4,264 | \$1,218 | \$8,234 | \$5,704 | \$768 | \$15,680 | \$6,192 | \$743 | \$21,511 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | \$641 | \$404 | \$1,584 | \$844 | \$652 | \$3,520 | \$929 | \$572 | \$8,888 |
| PRICE PER SQUARE FOOT | \$126 | \$126 | \$126 | \$137 | \$102 | \$192 | \$144 | \$103 | \$219 | \$182 | \$128 | \$353 |
| WEIGHTED AVG PRICE PER SQ FT | \$126 | | | \$139 | | | \$146 | | | \$181 | | |
| MEDIAN PRICE PER SQ FT | \$126 | | | \$136 | | | \$140 | | | \$180 | | |

| | 1998-2000 | 2000-2002 | 2002-2004 | 1998-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 8% | 5% | 26% | 44% | 6% |
| % change of weighted avg price/sq ft | 11% | 5% | 23% | 43% | 6% |
| % change of median price/sq ft | 7% | 3% | 29% | 43% | 6% |
| % change of sales prices | 34% | 13% | 24% | 88% | 11% |

**CONVENTIONAL SFD HOMES
HUNTER'S CREEK**

| | 1998 (N = 16) | | | 2000 (N = 95) | | | 2002 (N = 201) | | | 2004 (N = 319) | | |
|------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|----------------|-----------|-----------|----------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$167,463 | \$106,500 | \$272,000 | \$191,581 | \$115,000 | \$365,000 | \$200,153 | \$123,000 | \$340,000 | \$254,042 | \$150,000 | \$525,000 |
| Living Area in SF | 2,119 | 1,310 | 3,166 | 2,198 | 1,438 | 3,857 | 2,219 | 1,133 | 3,758 | 2,284 | 1,410 | 4,293 |
| Lot Size in Square Feet | 7,474 | 5,000 | 11,700 | 7,684 | 4,648 | 17,424 | 7,214 | 610 | 11,163 | 8,020 | 5,000 | 15,000 |
| Year Built | 1997 | 1997 | 1998 | 1998 | 1997 | 2000 | 1999 | 1997 | 2002 | 2000 | 1997 | 2004 |
| Age of Home when sold | 1 | 0 | 1 | 2 | 0 | 3 | 3 | 0 | 5 | 4 | 0 | 7 |
| Annual Property Tax Amount | \$1,546 | \$170 | \$5,000 | \$1,999 | \$372 | \$5,708 | \$2,641 | \$486 | \$4,962 | \$3,159 | \$140 | \$6,821 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$581 | \$180 | \$1,184 | \$477 | \$20 | \$1,184 | \$466 | \$20 | \$1,812 | \$447 | \$4 | \$2,200 |
| PRICE PER SQUARE FOOT | \$78 | \$65 | \$99 | \$87 | \$61 | \$113 | \$91 | \$53 | \$128 | \$112 | \$59 | \$153 |
| WEIGHTED AVG PRICE PER SQ FT | \$79 | | | \$88 | | | \$91 | | | \$111 | | |
| MEDIAN PRICE PER SQ FT | \$76 | | | \$87 | | | \$91 | | | \$112 | | |

| | 1998-2000 | 2000-2002 | 2002-2004 | 1998-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 11% | 5% | 24% | 44% | 6% |
| % change of weighted avg price/sq ft | 11% | 3% | 23% | 41% | 6% |
| % change of median price/sq ft | 15% | 5% | 23% | 48% | 7% |
| % change of sales prices | 14% | 4% | 27% | 52% | 7% |

Case Study 7: Fairview Village

Fairview Village is a smart growth community in Fairview, Oregon. A broker based in Fairview was selected to identify a market competitor, gather MLS data, and give detailed project descriptions for a full understanding of the two communities. Lakeview Estates was selected as the conventional suburban community for this analysis. While Fairview Village has some attached and multifamily dwelling units, they were not included in this case study because there is no community nearby that serves as a market counterpart. The study was conducted in 2005 and examines only single-family detached dwellings. Construction on the developments began around the same time. In Lakeview Estates, only resold homes without a lake view were included in the analysis because the broker attests that buyers seeking a lake view would not consider any homes that did not have that particular amenity. Thus Fairview Village was not a true comparable for those buyers.

Project Websites

Fairview Village: <http://www.fairviewvillage.com/>

Lakeview Estates: No website found.

Smart Growth Community Description: Fairview Village

Project Summary

Fairview Village is a 93-acre, mixed-use community being developed by a regional homebuilder, which will contain more than 600 households at build-out. Single-family detached homes, townhouses, apartments, and live/work units can be found in the development. A primary goal of the project is to create a community where connections between people can develop easily. To this end, Fairview Village is designed to be pedestrian and bicycle friendly. The site layout and home designs were modeled after historic garden communities such as Shaker Heights outside of Cleveland, Ohio.

Location

The development is along the southern border of Fairview's historic residential center. It has easy access to Interstate 84 and is 14 miles from downtown Portland. The Portland International Airport is 11 miles away. Fairview Village is serviced by Portland-area public transit and the Reynolds School District. The community has one elementary school and one preschool within its boundaries.

Home Characteristics

Designs for single-family detached homes in Fairview Village were inspired by Portland's historic neighborhoods. Styles include Traditional Craftsman, Queen Anne, and Tudor. Despite this broad range of styles, there is some cohesiveness in the community, as virtually all of the homes have old-world styling and covered front porches. The homes' garages are detached and are behind each property, accessed via alleys. According to the broker, lot sizes within Fairview Village tend to be smaller than those in typical suburban developments. The community has numerous homeowners' associations, each taking care of their respective buildings and maintaining their public areas.

Community Amenities

Retail storefronts, offices, and civic institutions are in the development. Stores include national big-box retailers, which are at the project's perimeter yet are still integrated with the pedestrian-friendly nature of the community. Fairview Village has several public parks. Additionally, it contains Fairview City Hall, a library, a post office, and an elementary school.

Conventional Suburban Community Description: Lakeview Estates

Project Summary

Lakeview Estates is a conventional suburban development community with homes constructed as early as 1994. The price range and average square footages of the homes in the development are nearly identical to those of Fairview Village, making it an excellent market comparison.

Location

The development is two miles south of Fairview Village and within a five-minute drive of the amenities in Fairview Village, such as the post office, shops, and city hall. Lakeview Estates is near the Columbia River, which has boating and other water sports. A public boat ramp is one mile from the community. Lakeview Estates is in the same school district as Fairview Village, Reynolds School District.

Home Characteristics

The subdivision's lot sizes are described as standard for a conventional suburban development in this market. Most homes have attached, street-facing, two-car garages, but some have garages that can accommodate three cars.

Community Amenities

Homes in Lakeview Estates have access to the lake via a public park. The lake can be used for recreational activities, including boating. The community does not have any other significant amenities that affect home prices.

Resale Performance Comparison: Fairview Village and Lakeview Estates

Fairview Village's home prices per square foot increased 7 percent annually between 2001 and 2004, exceeding Lakeview Estates' CAGR of 6 percent. There were 41 resales in Fairview Village during the years studied and 103 resales in Lakeview Estates. The homes in both communities were comparable in terms of living area, year constructed, property taxes, and annual homeowners' association dues. Qualitative evidence from the realtor indicates smaller lot sizes in Fairview Village, a common trade-off for the conveniences found in a smart growth community. The price per square foot was slightly higher in the smart growth community in all years studied, making Fairview Village the top performer by a small margin.

Top Performer: Smart growth community

**SMART GROWTH SFD HOMES
FAIRVIEW VILLAGE**

| | 2001 (N = 5) | | | 2002 (N = 12) | | | 2003 (N = 13) | | | 2004 (N = 11) | | |
|------------------------------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$189,400 | \$159,000 | \$237,000 | \$212,914 | \$153,000 | \$349,000 | \$272,742 | \$196,750 | \$419,500 | \$230,190 | \$169,500 | \$347,950 |
| Living Area in SF | 1,721 | 1,260 | 2,238 | 1,738 | 1,179 | 2,985 | 2,115 | 1,540 | 3,172 | 1,697 | 1,151 | 2,470 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1998 | 1996 | 1999 | 1998 | 1996 | 2000 | 1999 | 1996 | 2002 | 1999 | 1996 | 2002 |
| Age of Home when sold | 3 | 2 | 5 | 4 | 2 | 6 | 4 | 1 | 7 | 5 | 2 | 8 |
| Annual Property Tax Amount | \$2,594 | \$2,265 | \$3,272 | \$2,727 | \$1,926 | \$4,269 | \$3,109 | \$2,159 | \$5,280 | \$2,610 | \$1,926 | \$3,388 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$258 | \$135 | \$600 | \$241 | \$120 | \$660 | \$242 | \$110 | \$600 | \$256 | \$120 | \$720 |
| PRICE PER SQUARE FOOT | \$112 | \$101 | \$126 | \$123 | \$110 | \$140 | \$129 | \$114 | \$139 | \$137 | \$113 | \$162 |
| WEIGHTED AVG PRICE PER SQ FT | \$114 | | | \$124 | | | \$129 | | | \$136 | | |
| MEDIAN PRICE PER SQ FT | \$114 | | | \$121 | | | \$129 | | | \$138 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 10% | 5% | 6% | 23% | 7% |
| % change of weighted avg price/sq ft | 8% | 4% | 5% | 19% | 6% |
| % change of median price/sq ft | 7% | 7% | 7% | 21% | 7% |
| % change of sales prices | 12% | 28% | -16% | 22% | 7% |

**CONVENTIONAL SFD HOMES
LAKEVIEW ESTATES**

| | 2001 (N = 13) | | | 2002 (N = 19) | | | 2003 (N = 29) | | | 2004 (N = 42) | | |
|------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$186,162 | \$129,900 | \$245,000 | \$199,353 | \$149,000 | \$280,000 | \$210,883 | \$135,900 | \$279,900 | \$209,430 | \$140,000 | \$360,000 |
| Living Area in SF | 1,796 | 1,472 | 2,278 | 1,858 | 1,256 | 2,732 | 1,814 | 1,284 | 2,385 | 1,714 | 1,247 | 2,891 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1998 | 1996 | 2000 | 1998 | 1995 | 2001 | 2000 | 1996 | 2002 | 2000 | 1994 | 2003 |
| Age of Home when sold | 3 | 1 | 5 | 4 | 1 | 7 | 3 | 1 | 7 | 5 | 1 | 10 |
| Annual Property Tax Amount | \$2,799 | \$1,922 | \$3,678 | \$2,822 | \$1,582 | \$3,928 | \$2,706 | \$1,858 | \$3,553 | \$2,595 | \$1,562 | \$5,763 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$126 | \$100 | \$204 | \$552 | \$300 | \$624 | \$457 | \$75 | \$1,104 | \$572 | \$108 | \$1,284 |
| PRICE PER SQUARE FOOT | \$103 | \$87 | \$120 | \$108 | \$96 | \$127 | \$116 | \$91 | \$135 | \$122 | \$94 | \$159 |
| WEIGHTED AVG PRICE PER SQ FT | \$104 | | | \$107 | | | \$116 | | | \$122 | | |
| MEDIAN PRICE PER SQ FT | \$106 | | | \$106 | | | \$115 | | | \$121 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 5% | 7% | 5% | 18% | 6% |
| % change of weighted avg price/sq ft | 4% | 8% | 5% | 18% | 6% |
| % change of median price/sq ft | 0% | 9% | 5% | 15% | 5% |
| % change of sales prices | 7% | 6% | -1% | 12% | 4% |

Case Study 8: Haile Village Center

Haile Village Center is a 50-acre, mixed-use neighborhood at the core of Haile Plantation, a 1,700-acre development in Alachua County, Florida. While Haile Plantation was envisioned as a smart growth community, in application only the Village Center has been developed with the walkable, gridded streets; small lot sizes; and small setbacks that characterize such communities. For this reason, only Haile Village Center was considered in this study. Due to changes in the MLS system, historical sales records were unavailable from traditional real estate agents. Consequently, a Florida-based company specializing in real estate market information was selected to pull data on the communities and determine an appropriate market comparable. The conventional suburban development community selected for the comparison is Sterling Place, which started construction in 1998. Haile Village Center contains a mix of residential building types. Only single-family detached homes were used for this study, due to the lack of available comparable communities for multifamily dwellings.

Project Websites

Haile Village Center: <http://www.haileguide.com/>

Sterling Place: No website found.

Smart Growth Community Description: Haile Village Center

Project Summary

Haile Village Center is only a half-mile long north to south, which means residents have easy access to the amenities at the village's core. The main goal at Haile Plantation is creating a place with a sense of community through a blend of 200 distinctive homes, diverse residents, natural trails, and recreational amenities in a mixed-use setting.

Location

Haile Village Center is four miles southwest of downtown Gainesville and five miles from the University of Florida. It is near Interstate 75.

Home Characteristics

The single-family detached homes in Haile Village Center were constructed as early as 1996. The houses have columned porches with crawl spaces, verandas, high ceilings, and extensive wood detail, similar to traditional Southern cottages found in older Florida cities. Certain lots permit homeowners to construct apartments above their garages or operate businesses, including bed-and-breakfast inns. Some home sites are reserved for custom homes, which can be designed and built by the architect and builder of the owner's choice.

Community Amenities

The amenities in Haile Village Center are designed to facilitate social interaction and community spirit. Residents can visit the weekly farmers' market or walk or bike to the community's playgrounds and trails. Within a short walk of most homes in the development, the Village Center provides medical services, a market, a café, a bank, a post office, and several boutique shops. Additional recreational facilities are available for an added fee through the Haile Plantation Golf and Country Club, which has tennis courts, a swimming pool, and a golf course. The community has many social groups for residents, including a book club, garden club, and bridge club. At the heart of Haile Village Center are the Meeting Hall and Plaza, which serve as gathering places for weddings, parties, and conferences.

Conventional Suburban Community Description: Sterling Place

Project Summary

Sterling Place was developed as a standard suburb by a regional developer that is emerging as a leader in green building. Single-family detached homes were constructed as early as 1998. The community's street patterns, which combine curvilinear streets and cul-de-sacs, are similar to those found in most American suburbs.

Location

The development is walking distance from A-rated Talbot Elementary School and a park. It is approximately seven miles northeast of downtown Gainesville, eight miles from the University of Florida, and two miles from the Gainesville Regional Airport. The nearest highway is 13 miles from the development. Shopping centers are less than two miles from Sterling Place.

Home Characteristics

The homes in Sterling Place have large lawns and front-facing two-car garages on cul-de-sac streets. Some homes have rear screened-in porches, and some units have pools. Most of the houses include luxury amenities such as high ceilings, fireplaces, and Jacuzzi tubs in the master bathrooms. The majority of the community's homes have siding exteriors.

Community Amenities

Limited information is available about this community's amenities. Streets do not have sidewalks along both sides. Sterling Place is close to a grocery-anchored shopping center and three parks.

Resale Performance Comparison: Haile Village Center and Sterling Place

From 2001 through 2004, Haile Village Center had just one resale. In the same time period, Sterling Place had 17 resales. There are too few records to determine a trend of price appreciation in Haile Village Center, so a top performer cannot be declared in this case study. Future investigation of Haile Village Center in later years or analysis of homes in Haile Plantation beyond the Village Center may yield sufficient resales for a full analysis.

Top Performer: None. The number of resales in the smart growth community is insufficient to draw a conclusion.

**SMART GROWTH SF HOMES
HAILE VILLAGE CENTER**

Sales Price

Square Footage (Effective Adjusted)

Lot Size in Square Feet

Year Built

Age of Home when sold

Annual Property Tax Amount

County/State

Special Assessments

Annual HOA Fees

PRICE PER SQUARE FOOT

WEIGHTED AVG PRICE PER SQ FT

MEDIAN PRICE PER SQ FT

| | 2001 (N = 0) | | | 2002 (N = 0) | | | 2003 (N = 0) | | | 2004 (N = 1) | | |
|-------------------------------------|--------------|---------|---------|--------------|---------|---------|--------------|---------|---------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | \$118,000 | \$118,000 | \$118,000 |
| Square Footage (Effective Adjusted) | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 1,085 | 1,085 | 1,085 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 996 | 996 | 996 |
| Year Built | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 1996 | 1996 | 1996 |
| Age of Home when sold | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 8 | 8 | 8 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | \$109 | \$109 | \$109 |
| WEIGHTED AVG PRICE PER SQ FT | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | \$120 | \$120 | \$120 |
| MEDIAN PRICE PER SQ FT | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | \$109 | \$109 | \$109 |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | n/a | n/a | n/a | n/a | n/a |
| % change of weighted avg price/sq ft | n/a | n/a | n/a | n/a | n/a |
| % change of median price/sq ft | n/a | n/a | n/a | n/a | n/a |
| % change of sales prices | n/a | n/a | n/a | n/a | n/a |

CONVENTIONAL SF HOMES

STERLING PLACE

Sales Price

Living Area in SF (Effective Adjusted)

Lot Size in Square Feet

Year Built

Age of Home when sold

Annual Property Tax Amount

County/State

Special Assessments

Annual HOA Fees

PRICE PER SQUARE FOOT

WEIGHTED AVG PRICE PER SQ FT

MEDIAN PRICE PER SQ FT

| | 2001 (N = 3) | | | 2002 (N = 4) | | | 2003 (N = 9) | | | 2004 (N = 1) | | |
|--|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$218,000 | \$192,000 | \$234,000 | \$221,225 | \$209,900 | \$235,000 | \$237,978 | \$195,000 | \$326,300 | \$265,000 | \$265,000 | \$265,000 |
| Living Area in SF (Effective Adjusted) | 2,752 | 2,549 | 2,865 | 2,688 | 2,535 | 2,901 | 2,639 | 2,401 | 2,982 | 2,499 | 2,499 | 2,499 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1998 | 1998 | 1999 | 1999 | 1998 | 2000 | 1999 | 1998 | 2000 | 1998 | 1998 | 1998 |
| Age of Home when sold | 3 | 2 | 3 | 3 | 2 | 4 | 4 | 3 | 5 | 6 | 6 | 6 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | \$79 | \$75 | \$82 | \$82 | \$79 | \$85 | \$90 | \$81 | \$109 | \$106 | \$106 | \$106 |
| WEIGHTED AVG PRICE PER SQ FT | \$79 | \$75 | \$82 | \$82 | \$79 | \$85 | \$90 | \$81 | \$109 | \$106 | \$106 | \$106 |
| MEDIAN PRICE PER SQ FT | \$80 | \$75 | \$82 | \$83 | \$79 | \$85 | \$89 | \$81 | \$109 | \$106 | \$106 | \$106 |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 4% | 9% | 18% | 34% | 10% |
| % change of weighted avg price/sq ft | 4% | 10% | 18% | 34% | 10% |
| % change of median price/sq ft | 4% | 7% | 19% | 32% | 10% |
| % change of sales prices | 1% | 8% | 11% | 22% | 7% |

Case Study 9: I'On

I'On is in Mt. Pleasant, South Carolina, a small city approximately seven miles northeast of Charleston. A local broker familiar with I'On and its surrounding developments was selected to help identify a market comparable, gather MLS data, and give detailed project descriptions for a full understanding of the two communities. The conventional suburban community selected for the comparison is Belle Hall, which is 11 miles from downtown Charleston. Both communities contain only single-family detached homes.

Project Websites

I'On: <http://www.ionvillage.com/>

Belle Hall: <http://bellehallplantation.com/>

Smart Growth Community Description: I'On

Project Summary

I'On is a 243-acre, mixed-use, and pedestrian-oriented development. It had been under construction for four years at the time of this case study. The first homes in I'On were completed in 1998, with 850 units expected upon build-out. The developers aimed to establish a built environment that reinforces local character, generates a sense of community, and provides high-quality homes.

Location

I'On is next to Route 17, which provides easy access to downtown Charleston. In addition, it is close to both Interstate 526 and Interstate 26, which head to North Charleston, Daniel Island, and Interstate 95. The community has one bus stop that connects it to the Charleston metropolitan area. The schools that service the community, James B. Edwards Elementary, Moultrie Middle, and Wando High School, received a score of "excellent" in the 2004 South Carolina State Report Card.

Home Characteristics

Each home in I'On is individually designed using the community's urban design guidelines and is constructed by one of 21 approved independent builders. With lot sizes to accommodate a variety of home styles and sizes, the builders provide homes ranging from 950 square feet to more than 6,500 square feet for a wide range of individual tastes. The homes are built with quality and sustainability in mind and have an architectural style that is appropriate to the region, which is referred to as "the Lowcountry." According to the broker, homes typically are constructed with materials that "age gracefully," such as wood siding. Only single-family detached homes are provided in the community, although the original plans called for attached homes and multifamily units.

Community Amenities

The neighborhood has been designed to provide public access to the community's natural and manmade amenities. Linear parks, playgrounds, a lakefront performance area, and a small commercial area are all available in I'On. The development also has many paths that front the lake and marshes, allowing public access to the natural spaces in and around the community. Commercial and civic structures throughout the community include schools, a grocery store, a salon, several restaurants, law offices, and professional suites. The developer created I'On Trust, a nonprofit organization, to help foster civic and cultural life in the neighborhood and throughout the region. The trust has hosted numerous events, such as free symphony concerts, garden tours and shows, guest speakers, wine festivals, outdoor movies, and art shows.

Conventional Suburban Community Description: Belle Hall

Project Summary

At 583 acres and with more than 1,800 homes, Belle Hall is an established development in Mt. Pleasant consisting of seven subsections with different price ranges and home styles. The design of Belle Hall flows from the smaller, lower-end homes closer to the entrance to the higher-priced homes in the back of the development along the marsh. Belle Hall's first homes were constructed in 1993. Although many of the subsections are built out, a few still had new construction occurring in 2005, such as the Evian and Hibben subdivisions.

Location

The development is close to Interstate 526, which gives residents easy access to Interstate 26, North Charleston, and Daniel Island. It is adjacent to the Jones Center, a Mt. Pleasant recreational facility with athletic fields, an indoor swimming pool, and a basketball court. A few shops and restaurants are within walking distance of the homes in Belle Hall. The community is in the Belle Hall Elementary School District and shares the same high school as I'On. Belle Hall Elementary School, like most of the other schools in Mt. Pleasant, received a score of "excellent" in the 2004 South Carolina State Report Card.

Home Characteristics

The community offers single-family detached dwellings of two types: tract homes and custom-built houses. Most of the tract houses have vinyl siding, asphalt shingle roofs, and attached two-car garages. The custom-built homes have strict architectural guidelines related to materials and design to attract high-end homeowners.

Community Amenities

In addition to the city facilities located nearby, Belle Hall has its own clubhouse, two swimming pools, a basketball court, and a play park. The community also has ponds for fishing and tennis courts.

Resale Performance Comparison: I'On and Belle Hall

Belle Hall, the conventional suburban development, had a CAGR of 12 percent between 2001 and 2004, which exceeded the 10 percent CAGR of homes in I'On. During the years studied, there were 174 resales in Belle Hall and 72 resales in I'On. The homes in Belle Hall were on average several years older than those in the smart growth development. Residential properties in I'On were typically larger but had much smaller lots. In addition, the average sales price in 2004 in I'On was nearly twice that of Belle Hall. The price per square foot was significantly higher in the smart growth community in all years studied.

Top Performer: Conventional suburban development community

SMART GROWTH SFD HOMES

| | 2001 (N = 4) | | | 2002 (N = 9) | | | 2003 (N = 30) | | | 2004 (N = 29) | | |
|-------------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| On | | | | | | | | | | | | |
| Sales Price | \$413,000 | \$280,000 | \$589,000 | \$486,333 | \$350,000 | \$765,000 | \$525,987 | \$303,500 | \$850,000 | \$593,606 | \$355,000 | \$900,000 |
| Living Area in SF | 2,299 | 1,550 | 2,967 | 2,670 | 1,928 | 3,650 | 2,657 | 1,540 | 3,958 | 2,514 | 1,520 | 3,900 |
| Lot Size in Square Feet | 6,389 | 2,613 | 11,325 | 6,804 | 5,227 | 8,712 | 7,066 | 2,614 | 13,068 | 6,029 | 2,178 | 10,890 |
| Year Built | 1999 | 1998 | 2000 | 1999 | 1998 | 2001 | 2000 | 1998 | 2002 | 2000 | 1998 | 2003 |
| Age of Home when sold | 2 | 1 | 3 | 3 | 1 | 4 | 3 | 1 | 5 | 4 | 1 | 6 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$400 | \$400 | \$400 | \$467 | \$400 | \$500 | \$500 | \$500 | \$500 | \$500 | \$500 | \$500 |
| PRICE PER SQUARE FOOT | \$180 | \$156 | \$199 | \$181 | \$154 | \$210 | \$198 | \$160 | \$254 | \$238 | \$191 | \$313 |
| WEIGHTED AVG PRICE PER SQ FT | \$180 | | | \$182 | | | \$198 | | | \$236 | | |
| MEDIAN PRICE PER SQ FT | \$182 | | | \$182 | | | \$191 | | | \$229 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 1% | 9% | 20% | 32% | 10% |
| % change of weighted avg price/sq ft | 1% | 9% | 19% | 31% | 10% |
| % change of median price/sq ft | 0% | 5% | 20% | 26% | 8% |
| % change of sales prices | 18% | 8% | 13% | 44% | 13% |

CONVENTIONAL SFD HOMES

| | 2001 (N = 86) | | | 2002 (N = 67) | | | 2003 (N = 59) | | | 2004 (N = 62) | | |
|-------------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Belle Hall | | | | | | | | | | | | |
| Sales Price | \$197,561 | \$151,000 | \$600,000 | \$225,287 | \$158,500 | \$730,000 | \$226,875 | \$164,900 | \$577,000 | \$292,411 | \$182,700 | \$825,000 |
| Living Area in SF | 1,903 | 1,300 | 3,711 | 1,983 | 1,328 | 3,750 | 1,976 | 1,300 | 3,716 | 1,996 | 1,300 | 5,000 |
| Lot Size in Square Feet | 11,191 | 6,969 | 30,926 | 11,424 | 6,098 | 27,442 | 10,135 | 7,405 | 19,950 | 12,453 | 6,969 | 32,669 |
| Year Built | 1997 | 1993 | 1999 | 1996 | 1993 | 2000 | 1997 | 1993 | 2000 | 1998 | 1993 | 2003 |
| Age of Home when sold | 4 | 2 | 8 | 6 | 2 | 9 | 6 | 3 | 10 | 7 | 1 | 11 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$373 | \$315 | \$395 | \$395 | \$250 | \$500 | \$417 | \$330 | \$500 | \$427 | \$125 | \$500 |
| PRICE PER SQUARE FOOT | \$104 | \$74 | \$162 | \$111 | \$85 | \$195 | \$115 | \$98 | \$155 | \$144 | \$101 | \$223 |
| WEIGHTED AVG PRICE PER SQ FT | \$106 | | | \$114 | | | \$115 | | | \$147 | | |
| MEDIAN PRICE PER SQ FT | \$101 | | | \$109 | | | \$115 | | | \$141 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 7% | 4% | 25% | 39% | 12% |
| % change of weighted avg price/sq ft | 7% | 1% | 28% | 38% | 11% |
| % change of median price/sq ft | 8% | 5% | 22% | 40% | 12% |
| % change of sales prices | 14% | 1% | 29% | 48% | 14% |

Case Study 10: Kentlands and Lakelands

Kentlands and Lakelands are two smart growth communities in Gaithersburg, Maryland, part of the greater Washington, D.C., metropolitan area. These two master-planned communities were developed separately, with different developers and builders, but they are adjacent and share one town center. Many of the residential and commercial streets in one project continue into the other project without interruption. To the casual visitor, it is sometimes difficult to determine where one project ends and the other begins. A local broker was selected to provide MLS data. The conventional suburban community for comparison is Quince Orchard Park, which is across the street from the two smart growth communities. Houses were built beginning in 1990 in Kentlands, 1995 in Lakelands, and 1996 in Quince Orchard Park. All three communities contain single-family detached houses and townhouses. Therefore, it was possible to examine sales performance for both types of housing for the years 2000, 2002, and 2004.

Project Websites

Kentlands: <http://www.kentlandsusa.com/>

Lakelands: <http://www.lakelands.org/>

Quince Orchard Park: <http://www.quinceorchardpark.com/>

Smart Growth Community Description: Kentlands

Project Summary

Kentlands, on 352 acres, is one of the first master-planned smart growth communities ever developed. The project provides a broad mix of housing types, including live-work units, senior housing, in-law quarters above garages, and apartments. There are also commercial, religious, and civic uses in the project. Kentlands is a walkable community, with narrow streets, small blocks with many intersections, alleys, and pedestrian paths, making it easy for people to get around by car, bike, or foot. A primary goal of the project is to give residents convenient access to goods, services, recreation, and jobs without having to drive.

Location

Kentlands is approximately 22 miles from Washington, D.C. It is bounded by Great Seneca Highway, Quince Orchard Road, and Darnestown Road. Kentlands is three miles from the intersection of I-270 and I-370. I-270 is the primary north-south highway in Montgomery County and provides direct access to I-495, the Washington Beltway. A Montgomery County Ride On bus provides local service to and from the Shady Grove Metro Station, which is about seven miles from Kentlands. Rachel Carson Elementary School is in Kentlands, Lakelands Park Middle School is in Lakelands, and the local public high school, Quince Orchard, is less than a mile from the development.

Home Characteristics

There are over 2,000 residential units at Kentlands, ranging from single-family detached homes to rental housing above rear garages. Within this range are townhouses, cottages, brownstones, live-work units, condominiums, senior housing, and rental apartment units. The architectural styles at Kentlands range from Federalist and Colonial to Victorian and Craftsman. Materials are appropriate to their respective style and include stone, brick, wood, and siding. Although the housing stock may look custom built, it was constructed by local production builders. The single-family detached lot sizes vary from 1,000 square feet to over 12,000 square feet, with unit sizes ranging from 1,200 square feet to 4,500 square feet. The townhouse lots range from 1,000 square feet to over 8,000 square feet, but typically are 3,000 square feet. Unit size ranges from 1,000 square feet to almost 3,500 square feet. Single-family and townhouse garages are typically in the rear of the lots and accessed by alleys.

Community Amenities

Kentlands has numerous parks, tot lots, plazas, nature trails, and lakes, as well as clubhouses with swimming and other recreational activities. A church sits across the street from Rachel Carson Elementary School, and the city of Gaithersburg operates an arts center and a 99-seat theater in one of the converted barns original to the property. There is a town center with a first-run movie theater, national and local restaurants, shops, two full-service grocery stores, and other national big-box retailers. Live-work units contain an eclectic mix of merchants and professional offices. All of these amenities are walkable from anywhere in Kentlands. Similarly, as Lakelands and its streets integrate with Kentlands, the amenities in Lakelands are also a short walk from Kentlands.

Smart Growth Community Description: Lakelands

Project Summary

Lakelands is a 343-acre master-planned community that incorporates most, if not all, of the smart growth principles. Lakelands offers more than 1,600 residential units in a wide variety of housing types, along with parks and other open spaces and a town center. The community has small blocks with many streets intersections and rear alleys. This arrangement allows people to walk or drive to school, work, and other neighborhood destinations. The project broke ground in 1995.

Location

Lakelands is approximately 22 miles from Washington, D.C. It fronts both Great Seneca Highway and Darnestown Road. Like Kentlands, Lakelands is three miles from both I-370 and I-270, the primary north-south highway in Montgomery County. I-270 provides direct access to I-495, the Washington Beltway. Although no bus service runs through Lakelands proper, the Kentlands' Ride On bus that provides local service to and from the Shady Grove Metro Station is less than a half mile from the town center. Lakeland students attend Rachel Carson Elementary School in Kentlands, Lakelands Park Middle School in Lakelands, and Quince Orchard High School, which is almost a mile and a half from Lakelands.

Home Characteristics

Lakelands offers a wide variety of housing types and price points. Although the architectural detailing of the housing does not equal that of Kentlands, many architectural styles adorn the traditional homes with front porches, side yards, and detached garages. There are also apartment buildings, apartments over garages, and double-stacked townhouses. Much of the housing material is brick and production siding. Almost all of the housing was built by national production builders. The single-family lots range from 1,000 square feet to over 10,000 square feet, while unit sizes range from less than 1,000 square feet to almost 4,500 square feet. The townhouse lots range from less than 1,000 square feet to about 3,400 square feet. Unit sizes range from 1,400 square feet to almost 3,000 square feet.

Community Amenities

Unlike conventional developments comprised of subdivisions, Lakelands is a collection of neighborhoods that offer amenities for the entire community. The Muddy Branch Creek Natural Preserve bounds the property on the east and offers trails, lakes, and wetlands. The city of Gaithersburg operates the Lakelands Park, a regional park with baseball and soccer fields. Next to the city park is the Lakelands Park Middle School, a synagogue, and a public playground operated by Lakelands. Lakelands has a corner store in a residential neighborhood a few blocks from the town center. There is also a clubhouse with swimming and other activities. Lakelands has numerous squares, plazas, greens, and playgrounds, as well as art work sponsored by the city's art program. All of these amenities are accessible by car or on foot from anywhere in Lakelands. Because the streets in Lakelands integrate with Kentlands, the public amenities in Kentlands are also a short walk from Lakelands.

Conventional Suburban Community Description: Quince Orchard Park

Project Summary

Quince Orchard Park is a master-planned suburban community divided into two sections: a 200-acre corporate office park and a 100-acre residential community with more than 500 housing units. While the office buildings have large surface parking lots fronting the buildings, it is possible for residents to walk or bike to the office buildings if they choose. The residential section has several smart growth elements incorporated into the project, most likely due to the popularity and proximity of Kentlands and Lakelands. Unlike most suburban residential communities that separate housing types by pods and cul-de-sacs, Quince Orchard Park has made an effort to create a network of small blocks and intersecting streets. Small parks, lakes, trails, tot lots, and recreational facilities are found throughout the project. At the time of this survey in 2005, both the residential section and the office section still had available parcels for development. The office park intends a total build-out of 1.45 million square feet of commercial space.

Location

Quince Orchard Park is across the street from Kentlands and Lakelands on Great Seneca Highway. It is the same distance to Washington D.C., I-270, I-370, and the I-495 Beltway as the two smart growth communities. Although no bus service runs through Quince Orchard Park, the Kentlands' Ride On bus that provides local service to and from the Shady Grove Metro Station is about three-quarters of a mile from the community. Residents of Quince Orchard Park are also in the school districts of both Lakelands Park Middle School in Lakelands and Quince Orchard High School. The community elementary school is Diamond Elementary School.

Home Characteristics

The residential units are single-family houses of various sizes, townhouses, and double-stacked townhouses. Built as early as 1996, most of the housing units have brick on just the front, with siding around the rest of the house, or siding is used on all sides. Some units have porches and rear garages. Most single-family detached units have garages in the front of the house. The single-family detached houses sit on lots that range in size from 2,100 square feet to over 4,600 square feet. The houses range in size from 1,500 square feet to almost 3,000 square feet. The townhouses sit on lots of 1,500 square feet to 3,000 square feet, while the unit sizes range from 1,500 square feet to 2,300 square feet.

Community Amenities

In addition to having an office park, Quince Orchard Park has a generous amount of amenities that enhance the residential portion of the project. There are numerous playgrounds and tot lots, trails, lakes, a community center with a swimming pool, and other recreational facilities throughout the community. The Muddy Branch Creek Natural Preserve bounds Quince Orchard Park on the east side and include Lake Halcyon, a reservoir that offers fishing. In addition to the internal amenities at Quince Orchard Park, the community is almost immediately across the street from the Kentlands and Lakelands town center. Many sales and marketing brochures for housing in Quince Orchard Park list the town center and other public amenities at Kentlands and Lakelands as benefits of living in Quince Orchard Park.

Resale Performance Comparison: Kentlands, Lakelands, and Quince Orchard Park

The single-family homes in Kentlands appreciated with a CAGR of 16 percent per year, compared to 17 percent in Lakelands and 13 percent in Quince Orchard Park. Kentlands had 121 resales in 2000, 2002, and 2004, and Lakelands had 50 resales in the same years. Quince Orchard Park had 31 resales in 2002 and 2004 only. The CAGR for the conventional community is thus based on limited data. The homes were comparable in average square footage and lot size. Kentlands is a bit older than the other communities. The single-family homes in Kentlands received the highest price per square foot of all the developments in these studies.

The townhouses in Quince Orchard Park appreciated 14 percent annually, while Kentlands and Lakelands appreciated 12 percent and 11 percent, respectively. There were 120 townhouses that were resold in Kentlands in 2000, 2002, and 2004. In the same years, Lakelands had 115 resales, and Quince Orchard

Park had 63. These numbers are large enough to make a confident conclusion about the top performer in the study. The lot sizes and square footages are similar, although Lakelands' lots tend to be smaller than the other two communities. The homeowners' association fees were comparable to each other. Again, Kentlands is a bit older than the other two communities and captured a higher average price per square foot.

*Top Performer: Smart growth communities for single-family detached homes
Conventional suburban development community for townhouses*

| | | | | | | | | | |
|-------------------------------------|-----|-----|-----|---------|---------|---------|---------|-------|---------|
| Annual Property Tax Amount | n/a | n/a | n/a | \$4,255 | \$3,677 | \$5,157 | \$4,427 | \$672 | \$5,304 |
| County/State | n/a | n/a | n/a | \$2,698 | \$2,283 | \$3,197 | \$2,790 | \$341 | \$3,315 |
| Special Assessments | n/a | n/a | n/a | \$589 | \$498 | \$698 | \$613 | \$144 | \$724 |
| Annual HOA Fees | n/a | n/a | n/a | \$724 | \$600 | \$756 | \$786 | \$756 | \$816 |
| PRICE PER SQUARE FOOT | n/a | n/a | n/a | \$176 | \$150 | \$216 | \$225 | \$182 | \$271 |
| WEIGHTED AVG PRICE PER SQ FT | n/a | | | \$207 | | | \$234 | | |
| MEDIAN PRICE PER SQ FT | n/a | | | \$168 | | | \$223 | | |

| | 2000-2002 | 2002-2004 | 2000-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | n/a | 27% | n/a | 13% |
| % change of weighted avg price/sq ft | n/a | 13% | n/a | 6% |
| % change of median price/sq ft | n/a | 33% | n/a | 15% |
| % change of sales prices | n/a | 39% | n/a | 18% |

| | | | | | | | | | |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Annual Property Tax Amount | \$3,986 | \$3,558 | \$5,056 | \$4,200 | \$3,231 | \$4,991 | \$4,042 | \$2,775 | \$5,056 |
| County/State | \$2,404 | \$2,103 | \$3,115 | \$2,580 | \$2,095 | \$3,072 | \$2,541 | \$1,800 | \$3,115 |
| Special Assessments | \$525 | \$459 | \$680 | \$563 | \$457 | \$670 | \$555 | \$393 | \$680 |
| Annual HOA Fees | \$660 | \$660 | \$660 | \$770 | \$600 | \$900 | \$841 | \$756 | \$1,272 |
| PRICE PER SQUARE FOOT | \$142 | \$106 | \$155 | \$179 | \$132 | \$221 | \$245 | \$179 | \$283 |
| WEIGHTED AVG PRICE PER SQ FT | \$140 | | | \$205 | | | \$242 | | |
| MEDIAN PRICE PER SQ FT | \$148 | | | \$183 | | | \$248 | | |

| | 2000-2002 | 2002-2004 | 2000-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 26% | 37% | 72% | 14% |
| % change of weighted avg price/sq ft | 46% | 18% | 72% | 15% |
| % change of median price/sq ft | 24% | 35% | 68% | 14% |
| % change of sales prices | 46% | 30% | 89% | 17% |

Case Study 11: King Farm

King Farm is a master-planned, smart growth community in Rockville, Maryland, a city in the greater metropolitan region of Washington, D.C. It is the focus of two different comparative property examinations in this case study. A local broker was selected to gather MLS data for both parts of this case study. There were no conventional master-planned, suburban communities to compare to King Farm in the city of Rockville of equal size, age of housing, or price point. However, other comparative opportunities were examined, and peer reviewers of this publication accepted the comparative exercises in this case study.

King Farm is across the street from the Shady Grove Metro station, and the project is considered a transit-oriented development, meaning it is centered around a transit center. Though not as dense as transit-oriented projects in urban infill locations, King Farm's relationship to the Metro station is analogous to an old streetcar suburb found in northern and midwestern cities. Also adjacent to the Metro station is Park Overlook, a conventional suburban community. Although Park Overlook is older than King Farm, this property comparison provides a good opportunity to examine housing sales in communities next to transit.

In addition to the transit-focused comparison, King Farm provides a location-based housing comparison. King Farm is in Rockville, six miles closer to Washington, D.C., than the city of Gaithersburg, although both municipalities are in Montgomery County. Municipal jurisdiction aside, both cities are in the same housing market, so it is possible to compare King Farm to Quince Orchard Park, the conventional suburban property selected in Case Study 10. (For community information about Quince Orchard Park, please refer to the description in Case Study 10.)

The transit comparison in this case study is the only instance in this study in which age of housing between the two comparative projects is mismatched. Construction at King Farm began in 1996, and homes built as early as 1998 were available for study. Houses examined in Park Overlook were built between 1967 and 1987. Because both communities have single-family detached housing and townhomes, both housing types were examined independently of each other.

A local broker with access to the regional MLS system was hired to provide data on resales during the time period. Due to the smart growth community's young age, data were available only for 2002 through 2004.

Project Websites

King Farm: <http://www.kingfarm.org/>

Park Overlook: <http://www.parkoverlook.org/>

Quince Orchard Park: <http://www.quinceorchardpark.com/>

Smart Growth Community Description: King Farm

Project Summary

King Farm is a 440-acre, master-planned community made up of five neighborhoods, each with its own defined center focusing on a prominent amenity, such as a park, a village center, or a community center. All of the neighborhoods seamlessly connect with one another through an integrated street network of narrow streets and small blocks. Residents, employees, and visitors can access any location in King Farm by foot, bike, or car, including the Shady Grove Metro station across the street from the project. Houses have detached garages with alleys running up the middle of most blocks. There are approximately 3,200 housing units of all types, including single-family homes, rentals, and condominiums, mixed with 125,000 square feet of neighborhood retail shops, including a national grocer, and 3,000,000 square feet of office space. About half of this office space had been built at the time of this study. The walk from the town center to the Metro station is approximately 10 minutes. King Farm has land set aside for an elementary school and a middle school, although neither school had been built at the time of this study. Housing close

to the street, on-street parking, picket fences, sidewalks, and street trees combine to make the public realm safe, inviting, and interesting.

Location

King Farm is in the city of Rockville, the second largest city in Maryland after Baltimore. The project is slightly more than three miles from Rockville's downtown and is 18 miles northwest of Washington, D.C. The property is bounded by Rockville Pike on the east and I-270 on the west side. Both the northern and southern arterial streets that frame the community provide access to I-270. Along with the Shady Grove Metro station across the street, this access makes King Farm ideally situated in the D.C. metropolitan market. Private shuttle service is available at different locations in King Farm to transport riders to and from the Metro station. Two school districts cover King Farm, depending on the housing location. The northern school cluster comprises Rosemont Elementary, Gaithersburg Middle, and Gaithersburg High. The southern school cluster includes College Gardens Elementary, Julius West Middle, and Richard Montgomery High.

Home Characteristics

All of the houses are positioned towards the front of the lot, and detached garage parking is accessed by rear alleys, even for townhouses. Some different types of housing share the same block, and many different housing types front the same street. The community has 825 single-family detached units and 425 single-family attached units. The architectural style in King Farm adheres to the local styles, including Cape Cod, Federal, and Colonial. The housing material is primarily brick and manufactured siding. Detached houses in this study were built from 1998 to 2002. They range in size from 1,600 square feet to 3,700 square feet, on lots between 1,700 and 8,900 square feet. Both national and local homebuilders were involved in the construction.

Community Amenities

King Farm has a town center with shops, restaurants, services, and a grocery store situated around a village green. There is an office park, a private shuttle to the Metro station, a community center, and 140 acres of open space and parks that range in size and use from tot lots and ballfields to natural settings with ponds and streams.

Conventional Suburban Community Description: Park Overlook

Project Summary

Park Overlook is a planned community of approximately 180 acres. The project is comprised of pods of townhouses and detached housing on cul-de-sacs, all connected to a collector road leading into and out of the community. With its mature trees, Park Overlook is a leafy suburban enclave. The townhouses and detached housing are separated from one another, but they share a community center, along with other amenities.

Location

Park Overlook is in Derwood, a small municipality of about 5,000 people next to Rockville. Park Overlook is slightly more than three miles from Rockville's downtown and 18 miles from Washington, D.C. The community is bounded by I-370, Redland Road, and Crabbs Branch Way and is about a 15-minute walk from the Shady Grove Metro station. Abutting Park Overlook is another conventionally planned suburban community. The schools covering Park Overlook are Candlewood Elementary, Shady Grove Middle, and Gaithersburg High.

Home Characteristics

Park Overlook's townhouse façades are brick and contain elements of Federal and Contemporary architectural styles. The single-family detached houses are two stories, some with small porches. The façades are typically brick and manufactured siding. The houses and townhouses are set back from the

street and have driveways leading to a garage in front of the houses and townhouses. Some of the pods have reserved and guest parking in the center. Due to the community's age, the trees and shrubs around the collector street are mature and lush. The detached housing ranges in size from 1,200 square feet to 2,550 square feet on lots from 12,000 square feet to 36,000 square feet. The townhouses range from 1,050 square feet to 1,500 square feet on lots of 1,400 square feet to 2,400 square feet.

Community Amenities

Park Overlook has a number of amenities both inside and outside the project. The community has small playgrounds and tot lots. There is also a community center with swimming and other recreational activities. In addition, the development includes Blueberry Hill Park, a 20-acre recreational park featuring tennis courts and ballfields and operated by Montgomery County. On the other side of Redland Road is Crabbs Branch Stream Valley Park, a 138-acre park consisting of green space, streams, and recreational space. Also less than a mile from Park Overlook and abutting Crabbs Branch Park is the Needwood Golf Course, a public golf course offering one 18-hole course and an executive course. A neighborhood shopping center anchored by the area's largest regional grocery store is less than a mile from the project.

Resale Performance Comparison: King Farm and Park Overlook

King Farm's single-family detached homes had a CAGR of 29 percent per year, which far exceeded the 19 percent CAGR of Park Overlook. King Farm had 38 home resales in 2002, 2003, and 2004, while Park Overlook had just nine resales in the same years. It is difficult to determine whether these communities are truly comparable because of the small number of resales in Park Overlook, the larger average home size and smaller average lot size in King Farm, and the older age of Park Overlook's homes.

The townhouses in King Farm appreciated by 22 percent annually, which is greater than the 20 percent appreciation in Park Overlook. King Farm had 74 resales in 2002, 2003, and 2004, and Park Overlook had 65. There are several issues with using these communities as comparables. Park Overlook's lot sizes and home sizes are generally smaller than those in King Farm. Additionally, as mentioned above, the homes in Park Overlook are more than 20 years older than those in King Farm. The homeowners' association fees were comparable to each other.

Despite this information, the communities may be considered market comparables in terms of location, making the smart growth community the top performer for both the townhouses and single-family detached dwelling units.

***Top Performer: Smart growth community for single-family detached homes
Smart growth community for townhouses***

**SMART GROWTH SFD HOMES
KING FARM**

| | 2002 (N = 15) | | | 2003 (N = 6) | | | 2004 (N = 17) | | |
|-------------------------------------|---------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$572,846 | \$498,000 | \$629,900 | \$630,833 | \$560,000 | \$695,000 | \$735,321 | \$520,000 | \$880,000 |
| Living Area in SF | 3,330 | 2,660 | 3,735 | 2,876 | 2,662 | 3,328 | 2,609 | 1,612 | 3,434 |
| Lot Size in Square Feet | 5,990 | 4,683 | 7,203 | 5,701 | 3,520 | 8,913 | 5,201 | 1,745 | 8,110 |
| Year Built | 2000 | 1998 | 2000 | 2000 | 1999 | 2002 | 2000 | 1998 | 2002 |
| Age of Home when sold | 2 | 2 | 4 | 3 | 1 | 4 | 4 | 2 | 6 |
| Annual Property Tax Amount | \$7,285 | \$6,355 | \$8,365 | \$7,046 | \$6,370 | \$8,042 | \$6,694 | \$4,709 | \$8,422 |
| County/State | \$4,209 | \$3,673 | \$4,820 | \$4,096 | \$3,725 | \$4,662 | \$3,889 | \$2,680 | \$4,885 |
| Special Assessments | \$919 | \$802 | \$1,052 | \$894 | \$813 | \$1,017 | \$849 | \$585 | \$1,066 |
| Annual HOA Fees | \$749 | \$708 | \$960 | \$744 | \$708 | \$780 | \$817 | \$780 | \$828 |
| PRICE PER SQUARE FOOT | \$173 | \$155 | \$221 | \$220 | \$196 | \$250 | \$287 | \$228 | \$353 |
| WEIGHTED AVG PRICE PER SQ FT | \$172 | | | \$219 | | | \$282 | | |
| MEDIAN PRICE PER SQ FT | \$169 | | | \$221 | | | \$266 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 27% | 30% | 66% | 29% |
| % change of weighted avg price/sq ft | 28% | 28% | 64% | 28% |
| % change of median price/sq ft | 31% | 20% | 58% | 26% |
| % change of sales prices | 10% | 17% | 28% | 13% |

**CONVENTIONAL SFD HOMES
PARK OVERLOOK**

| | 2002 (N = 3) | | | 2003 (N = 4) | | | 2004 (N = 2) | | |
|-------------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$318,167 | \$268,000 | \$400,000 | \$387,250 | \$300,000 | \$459,000 | \$376,500 | \$308,000 | \$445,000 |
| Living Area in SF | 1,935 | 1,320 | 2,552 | 1,850 | 1,320 | 2,552 | 1,576 | 1,220 | 1,932 |
| Lot Size in Square Feet | 20,015 | 17,746 | 23,092 | 21,699 | 14,142 | 36,245 | 14,076 | 2,400 | 25,752 |
| Year Built | 1973 | 1967 | 1985 | 1980 | 1967 | 1986 | 1976 | 1967 | 1985 |
| Age of Home when sold | 29 | 17 | 35 | 23 | 17 | 36 | 28 | 19 | 37 |
| Annual Property Tax Amount | \$4,073 | \$3,522 | \$4,965 | \$4,456 | \$3,890 | \$5,089 | \$3,543 | \$2,892 | \$4,194 |
| County/State | \$2,421 | \$2,130 | \$2,868 | \$2,532 | \$2,370 | \$2,778 | \$2,085 | \$1,601 | \$2,569 |
| Special Assessments | \$1,286 | \$1,131 | \$1,523 | \$1,344 | \$1,258 | \$1,475 | \$1,107 | \$850 | \$1,364 |
| Annual HOA Fees | \$384 | \$384 | \$384 | \$488 | \$384 | \$540 | \$592 | \$592 | \$592 |
| PRICE PER SQUARE FOOT | \$171 | \$139 | \$217 | \$214 | \$180 | \$240 | \$241 | \$230 | \$252 |
| WEIGHTED AVG PRICE PER SQ FT | \$164 | | | \$209 | | | \$239 | | |
| MEDIAN PRICE PER SQ FT | \$157 | | | \$218 | | | \$241 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 25% | 13% | 41% | 19% |
| % change of weighted avg price/sq ft | 27% | 14% | 45% | 21% |
| % change of median price/sq ft | 39% | 11% | 54% | 24% |
| % change of sales prices | 22% | -3% | 18% | 9% |

**SMART GROWTH TOWNHOMES
KING FARM**

| | 2002 (N = 12) | | | 2003 (N = 23) | | | 2004 (N = 39) | | |
|-------------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$374,317 | \$300,000 | \$441,000 | \$418,400 | \$350,000 | \$525,000 | \$551,886 | \$450,000 | \$680,000 |
| Living Area in SF | 1,860 | 1,560 | 2,537 | 1,705 | 1,400 | 2,516 | 1,876 | 1,400 | 2,984 |
| Lot Size in Square Feet | 1,999 | 1,480 | 2,822 | 1,825 | 1,280 | 3,938 | 2,054 | 1,308 | 3,779 |
| Year Built | 2000 | 1999 | 2001 | 2001 | 2000 | 2002 | 2001 | 1999 | 2002 |
| Age of Home when sold | 2 | 1 | 3 | 2 | 1 | 3 | 3 | 2 | 5 |
| Annual Property Tax Amount | \$4,814 | \$4,095 | \$5,846 | \$4,833 | \$4,179 | \$6,203 | \$5,192 | \$4,273 | \$6,603 |
| County/State | \$2,738 | \$2,291 | \$3,375 | \$2,751 | \$2,343 | \$3,603 | \$2,973 | \$2,401 | \$3,851 |
| Special Assessments | \$598 | \$500 | \$737 | \$600 | \$511 | \$786 | \$649 | \$524 | \$840 |
| Annual HOA Fees | \$739 | \$708 | \$780 | \$783 | \$780 | \$816 | \$814 | \$780 | \$840 |
| PRICE PER SQUARE FOOT | \$204 | \$166 | \$234 | \$249 | \$194 | \$311 | \$302 | \$203 | \$368 |
| WEIGHTED AVG PRICE PER SQ FT | \$201 | | | \$245 | | | \$294 | | |
| MEDIAN PRICE PER SQ FT | \$205 | | | \$244 | | | \$307 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 22% | 21% | 48% | 22% |
| % change of weighted avg price/sq ft | 22% | 20% | 46% | 21% |
| % change of median price/sq ft | 19% | 26% | 50% | 22% |
| % change of sales prices | 12% | 32% | 47% | 21% |

**CONVENTIONAL TOWNHOMES
PARK OVERLOOK**

| | 2002 (N = 23) | | | 2003 (N = 20) | | | 2004 (N = 22) | | |
|-------------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$231,191 | \$170,000 | \$280,000 | \$268,318 | \$228,750 | \$311,000 | \$308,991 | \$274,900 | \$344,000 |
| Living Area in SF | 1,354 | 1,220 | 1,520 | 1,352 | 1,220 | 1,572 | 1,253 | 1,060 | 1,520 |
| Lot Size in Square Feet | 1,579 | 1,400 | 2,400 | 1,697 | 1,400 | 2,400 | 1,623 | 1,400 | 2,400 |
| Year Built | 1985 | 1984 | 1987 | 1986 | 1984 | 1987 | 1985 | 1984 | 1987 |
| Age of Home when sold | 17 | 15 | 18 | 17 | 16 | 19 | 19 | 17 | 20 |
| Annual Property Tax Amount | \$2,862 | \$2,437 | \$3,298 | \$2,876 | \$2,524 | \$3,269 | \$2,767 | \$2,502 | \$3,169 |
| County/State | \$1,577 | \$1,303 | \$1,859 | \$1,585 | \$1,354 | \$1,841 | \$1,515 | \$1,339 | \$1,775 |
| Special Assessments | \$837 | \$692 | \$987 | \$816 | \$256 | \$977 | \$804 | \$711 | \$942 |
| Annual HOA Fees | \$603 | \$60 | \$720 | \$612 | \$588 | \$780 | \$610 | \$600 | \$732 |
| PRICE PER SQUARE FOOT | \$171 | \$139 | \$189 | \$199 | \$183 | \$225 | \$247 | \$224 | \$280 |
| WEIGHTED AVG PRICE PER SQ FT | \$171 | | | \$198 | | | \$247 | | |
| MEDIAN PRICE PER SQ FT | \$177 | | | \$199 | | | \$250 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 17% | 24% | 45% | 20% |
| % change of weighted avg price/sq ft | 16% | 24% | 44% | 20% |
| % change of median price/sq ft | 13% | 25% | 41% | 19% |
| % change of sales prices | 16% | 15% | 34% | 16% |

Resale Performance Comparison: King Farm and Quince Orchard Park

Between 2002 and 2004, King Farm’s single-family detached homes had a CAGR of 29 percent, which was significantly more than the 13 percent CAGR of Quince Orchard Park. In the years studied, King Farm and Quince Orchard Park had 38 and 31 home resales, respectively. Homes in King Farm were larger on average than those in Quince Orchard Park, but the sales prices per square foot and homeowners’ association annual dues were comparable. The smart growth community is clearly the top performer in the comparison of single-family detached homes.

The townhouses in King Farm appreciated 22 percent annually, a greater rate than in Quince Orchard Park, which saw a 17 percent yearly increase from 2002 to 2004. King Farm had 74 resales in 2002, 2003, and 2004. In 2002 and 2004, Quince Orchard Park had 55. Square footages and homeowners’ association fees are comparable in the two communities.

Top Performer: Smart growth community for single-family detached homes
Smart growth community for townhouses

| SMART GROWTH SFD HOMES KING FARM | 2002 (N = 15) | | | 2003 (N = 6) | | | 2004 (N = 17) | | |
|-------------------------------------|---------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$572,846 | \$498,000 | \$629,900 | \$630,833 | \$560,000 | \$695,000 | \$735,321 | \$520,000 | \$880,000 |
| Living Area in SF | 3,330 | 2,660 | 3,735 | 2,876 | 2,662 | 3,328 | 2,609 | 1,612 | 3,434 |
| Lot Size in Square Feet | 5,990 | 4,683 | 7,203 | 5,701 | 3,520 | 8,913 | 5,201 | 1,745 | 8,110 |
| Year Built | 2000 | 1998 | 2000 | 2000 | 1999 | 2002 | 2000 | 1998 | 2002 |
| Age of Home when sold | 2 | 2 | 4 | 3 | 1 | 4 | 4 | 2 | 6 |
| Annual Property Tax Amount | \$7,285 | \$6,355 | \$8,365 | \$7,046 | \$6,370 | \$8,042 | \$6,694 | \$4,709 | \$8,422 |
| County/State | \$4,209 | \$3,673 | \$4,820 | \$4,096 | \$3,725 | \$4,662 | \$3,889 | \$2,680 | \$4,885 |
| Special Assessments | \$919 | \$802 | \$1,052 | \$894 | \$813 | \$1,017 | \$849 | \$585 | \$1,066 |
| Annual HOA Fees | \$749 | \$708 | \$960 | \$744 | \$708 | \$780 | \$817 | \$780 | \$828 |
| PRICE PER SQUARE FOOT | \$173 | \$155 | \$221 | \$220 | \$196 | \$250 | \$287 | \$228 | \$353 |
| WEIGHTED AVG PRICE PER SQ FT | \$172 | | | \$219 | | | \$282 | | |
| MEDIAN PRICE PER SQ FT | \$169 | | | \$221 | | | \$266 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 27% | 30% | 66% | 29% |
| % change of weighted avg price/sq ft | 28% | 28% | 64% | 28% |
| % change of median price/sq ft | 31% | 20% | 58% | 26% |
| % change of sales prices | 10% | 17% | 28% | 13% |

| CONVENTIONAL SFD HOMES QUINCE ORCHARD PARK | 2002 (N = 12) | | | 2003 (N = 0) | | | 2004 (N = 19) | | |
|---|---------------|-----------|-----------|--------------|---------|---------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$372,946 | \$338,900 | \$420,000 | n/a | n/a | n/a | \$518,900 | \$419,900 | \$620,000 |
| Living Area in SF | 2,164 | 1,568 | 2,532 | n/a | n/a | n/a | 2,343 | 1,970 | 2,876 |
| Lot Size in Square Feet | 3,129 | 2,492 | 4,418 | n/a | n/a | n/a | 3,070 | 2,126 | 4,668 |
| Year Built | 2000 | 1997 | 2002 | n/a | n/a | n/a | 1999 | 1997 | 2003 |
| Age of Home when sold | 3 | 0 | 5 | n/a | n/a | n/a | 5 | 1 | 7 |
| Annual Property Tax Amount | \$4,255 | \$3,677 | \$5,157 | n/a | n/a | n/a | \$4,427 | \$672 | \$5,304 |
| County/State | \$2,698 | \$2,283 | \$3,197 | n/a | n/a | n/a | \$2,790 | \$341 | \$3,315 |
| Special Assessments | \$589 | \$498 | \$698 | n/a | n/a | n/a | \$613 | \$144 | \$724 |
| Annual HOA Fees | \$724 | \$600 | \$756 | n/a | n/a | n/a | \$786 | \$756 | \$816 |
| PRICE PER SQUARE FOOT | \$176 | \$150 | \$216 | n/a | n/a | n/a | \$225 | \$182 | \$271 |
| WEIGHTED AVG PRICE PER SQ FT | \$207 | | | n/a | | | \$234 | | |
| MEDIAN PRICE PER SQ FT | \$168 | | | n/a | | | \$223 | | |

| | 2002-2004 | CAGR |
|--------------------------------------|-----------|------|
| % change of price per square foot | 27% | 13% |
| % change of weighted avg price/sq ft | 13% | 6% |
| % change of median price/sq ft | 33% | 15% |
| % change of sales prices | 39% | 18% |

**SMART GROWTH TOWNHOMES
KING FARM**

| | 2002 (N = 12) | | | 2003 (N = 23) | | | 2004 (N = 39) | | |
|-------------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$374,317 | \$300,000 | \$441,000 | \$418,400 | \$350,000 | \$525,000 | \$551,886 | \$450,000 | \$680,000 |
| Living Area in SF | 1,860 | 1,560 | 2,537 | 1,705 | 1,400 | 2,516 | 1,876 | 1,400 | 2,984 |
| Lot Size in Square Feet | 1,999 | 1,480 | 2,822 | 1,825 | 1,280 | 3,938 | 2,054 | 1,308 | 3,779 |
| Year Built | 2000 | 1999 | 2001 | 2001 | 2000 | 2002 | 2001 | 1999 | 2002 |
| Age of Home when sold | 2 | 1 | 3 | 2 | 1 | 3 | 3 | 2 | 5 |
| Annual Property Tax Amount | \$4,814 | \$4,095 | \$5,846 | \$4,833 | \$4,179 | \$6,203 | \$5,192 | \$4,273 | \$6,603 |
| County/State | \$2,738 | \$2,291 | \$3,375 | \$2,751 | \$2,343 | \$3,603 | \$2,973 | \$2,401 | \$3,851 |
| Special Assessments | \$598 | \$500 | \$737 | \$600 | \$511 | \$786 | \$649 | \$524 | \$840 |
| Annual HOA Fees | \$739 | \$708 | \$780 | \$783 | \$780 | \$816 | \$814 | \$780 | \$840 |
| PRICE PER SQUARE FOOT | \$204 | \$166 | \$234 | \$249 | \$194 | \$311 | \$302 | \$203 | \$368 |
| WEIGHTED AVG PRICE PER SQ FT | \$201 | | | \$245 | | | \$294 | | |
| MEDIAN PRICE PER SQ FT | \$205 | | | \$244 | | | \$307 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 22% | 21% | 48% | 22% |
| % change of weighted avg price/sq ft | 22% | 20% | 46% | 21% |
| % change of median price/sq ft | 19% | 26% | 50% | 22% |
| % change of sales prices | 12% | 32% | 47% | 21% |

**CONVENTIONAL TOWNHOMES
QUINCE ORCHARD PARK**

| | 2002 (N = 30) | | | 2003 (N = 0) | | | 2004 (N = 25) | | |
|-------------------------------------|---------------|-----------|-----------|--------------|---------|---------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$354,616 | \$297,000 | \$399,900 | n/a | n/a | n/a | \$459,352 | \$360,000 | \$540,000 |
| Living Area in SF | 1,994 | 1,520 | 2,319 | n/a | n/a | n/a | 1,901 | 1,519 | 2,325 |
| Lot Size in Square Feet | 2,380 | 1,543 | 3,928 | n/a | n/a | n/a | 2,019 | 437 | 3,007 |
| Year Built | 1999 | 1996 | 2002 | n/a | n/a | n/a | 2000 | 1996 | 2003 |
| Age of Home when sold | 3 | 0 | 6 | n/a | n/a | n/a | 4 | 1 | 8 |
| Annual Property Tax Amount | \$4,200 | \$3,231 | \$4,991 | n/a | n/a | n/a | \$4,042 | \$2,775 | \$5,056 |
| County/State | \$2,580 | \$2,095 | \$3,072 | n/a | n/a | n/a | \$2,541 | \$1,800 | \$3,115 |
| Special Assessments | \$563 | \$457 | \$670 | n/a | n/a | n/a | \$555 | \$393 | \$680 |
| Annual HOA Fees | \$770 | \$600 | \$900 | n/a | n/a | n/a | \$841 | \$756 | \$1,272 |
| PRICE PER SQUARE FOOT | \$179 | \$132 | \$221 | n/a | n/a | n/a | \$245 | \$179 | \$283 |
| WEIGHTED AVG PRICE PER SQ FT | \$205 | | | n/a | | | \$242 | | |
| MEDIAN PRICE PER SQ FT | \$183 | | | n/a | | | \$248 | | |

| | 2002-2004 | CAGR |
|--------------------------------------|-----------|------|
| % change of price per square foot | 37% | 17% |
| % change of weighted avg price/sq ft | 18% | 8% |
| % change of median price/sq ft | 35% | 16% |
| % change of sales prices | 30% | 14% |

Case Study 12: Middleton Hills

Middleton Hills is in Middleton, Wisconsin, a small city eight miles from downtown Madison. The community's first homes were completed in 1998, and resales began in 2000. A broker based in Middleton who has extensive knowledge about the residential real estate market in the area was hired to select a comparative community, gather the MLS data, and provide qualitative information about the communities. Northlake, a conventional suburban community with homes constructed as early as 1997, was selected as the comparative community. The study examines resales in 2000, 2002, and 2004. Middleton Hills contains some condominium units, which were resold starting in 2004. As there were data for only one year, a comparative condominium development was not sought out. Single-family detached dwellings were the sole housing type analyzed for this study.

Project Websites

Middleton Hills: <http://www.middletonhills.com/ehi/mhills/>

Northlake: <http://www.northlakeneighborhood.com/>

Smart Growth Community Description: Middleton Hills

Project Summary

Middleton Hills is a mixed-use development designed as a walkable community. The development contains 325 single-family detached homes and 100 condominiums. The community's streets are narrow, making them attractive to pedestrians. Of the project's 149 acres, 44 acres are reserved for parks, open lots, and wooded trails.

Location

Middleton Hills is adjacent to the 600-acre Pheasant Branch Creek Nature Preserve. It is near Lake Mendota, the airport, and the Middleton Business Park. Children residing in Middleton Hills attend schools in the Middleton School District.

Home Characteristics

Every home in Middleton Hills is custom built, but the community has a cohesive feel due to its architectural regulations and landscaping restrictions. Acceptable architectural styles for homes are Prairie, Craftsman, or Bungalow. Only natural products, such as wood, stone, or stucco siding, may be used on the exteriors. Each home must use several colors in the design and must have a front porch. Additionally, yards can include only plantings that are indigenous to the area. The homes have access to their two-car garages along rear alleys. The lots in the community are small, generally ranging from 4,800 square feet to 9,000 square feet, but sell for prices similar to those of a one-acre parcel in a more rural subdivision. There are design guidelines covering architectural styles and quality of construction materials and finishings. Interior spaces are usually higher end, often with fine woodwork and custom kitchens.

Community Amenities

Middleton Hills includes numerous public green spaces. The neighborhood has restaurants, coffee shops, a large grocery store, and a dry cleaner. The residents' mail is delivered to one central location, which encourages residents to walk around the community. The homeowners' association fee for a single-family detached home is \$225 per year.

Conventional Suburban Community Description: Northlake

Project Summary

Northlake is a typical suburban community that was established in the late 1990s. It is on Middleton's northern edge and contains approximately 300 units, all single-family detached homes on slightly less than 150 acres. The neighborhood layout resembles a wagon wheel, with a road circling around the perimeter and streets and cul-de-sacs coming off of that road. The community is family-oriented and seems to draw many corporate relocations.

Location

Northlake is a true suburban bedroom community, with all shopping and services a drive away. There is a city park close by, and the Pheasant Branch Creek Nature Preserve is approximately two miles east of the development. The neighborhood is served by Middleton School District, the same district attended by children of Middleton Hills.

Home Characteristics

The lot sizes in Northlake range from one-third to one-half acre. While there are some covenants for development in the community, they are not nearly as restrictive as in Middleton Hills. Northlake prohibits fences and swimming pools, and it has minimum square footage requirements for the homes. Generally, home sizes range from 2,500 square feet to 4,000 square feet. The homes have garages that accommodate at least three cars. Some of the houses have decorative brick or stone façades on the front elevation, but most are vinyl or aluminum sided. There are a good number of custom homes in the area, but many of the lots were purchased by higher-volume builders. All of the homes have higher-end architectural features.

Community Amenities

The community is on the suburban edge of development next to farm land, the Pheasant Branch Conservancy, and Orchid Heights Park. Homeowners' association fees are approximately \$100 per year.

Resale Performance Comparison: Middleton Hills and Northlake

Middleton Hills and Northlake had the same CAGR of 7 percent between 2000 and 2004. In Middleton Hills, there were 22 resales in 2000, 2002, and 2004 combined, while in Northlake there were 36 resales in the same years. These numbers are modest, indicating that any differences in appreciation over time may become more apparent as more homes in the communities change hands. The homes in Northlake are generally larger than the dwellings in the smart growth community. However, the homes in the smart growth neighborhood are slightly newer, tend to sell at higher prices, and sell for more per square foot than those in the conventional suburban community. The qualitative and quantitative data gathered for this study indicate that the communities are competitive and have identical appreciation rates.

Top Performer: None. Tie between the conventional suburban development and smart growth communities.

**SMART GROWTH SFD Homes
MIDDLETON HILLS**

| | 2000 (N = 3) | | | 2002 (N = 6) | | | 2004 (N = 13) | | |
|-------------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$255,367 | \$206,000 | \$334,100 | \$332,817 | \$272,000 | \$417,000 | \$470,108 | \$292,000 | \$650,000 |
| Living Area in SF | 2,003 | 1,536 | 2,512 | 2,544 | 1,700 | 3,300 | 2,875 | 1,768 | \$3,950 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1999 | 1998 | 1999 | 1999 | 1998 | 2000 | 2001 | 1998 | 2003 |
| Age of Home when sold | 1 | 1 | 2 | 3 | 2 | 4 | 3 | 1 | \$6 |
| Annual Property Tax Amount | \$6,089 | \$5,362 | \$7,295 | \$6,892 | \$5,991 | \$7,585 | \$7,576 | \$4,956 | \$10,495 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$225 | \$225 | \$225 | \$225 | \$225 | \$225 | \$225 | \$225 | \$225 |
| PRICE PER SQUARE FOOT | \$127 | \$115 | \$134 | \$135 | \$110 | \$160 | \$166 | \$139 | \$198 |
| WEIGHTED AVG PRICE PER SQ FT | \$127 | | | \$131 | | | \$164 | | |
| MEDIAN PRICE PER SQ FT | \$133 | | | \$137 | | | \$165 | | |

| | 2000-2002 | 2002-2004 | 2000-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 6% | 23% | 30% | 7% |
| % change of weighted avg price/sq ft | 3% | 25% | 28% | 6% |
| % change of median price/sq ft | 3% | 21% | 24% | 6% |
| % change of sales prices | 30% | 41% | 84% | 16% |

**CONVENTIONAL SFD HOMES
NORTHLAKE**

| | 2000 (N = 6) | | | 2002 (N = 11) | | | 2004 (N = 19) | | |
|-------------------------------------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$287,800 | \$206,900 | \$339,000 | \$349,891 | \$296,000 | \$415,500 | \$371,411 | \$290,000 | \$436,000 |
| Living Area in SF | 3,049 | 2,179 | 3,551 | 3,042 | 2,300 | 4,000 | 3,063 | 2,419 | 3,750 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1999 | 1998 | 1999 | 1999 | 1997 | 2001 | 1999 | 1997 | 2003 |
| Age of Home when sold | 1 | 1 | 2 | 3 | 1 | 5 | 5 | 1 | 7 |
| Annual Property Tax Amount | \$6,592 | \$4,780 | \$7,267 | \$6,984 | \$6,114 | \$8,810 | \$6,694 | \$5,701 | \$7,799 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 | \$100 |
| PRICE PER SQUARE FOOT | \$95 | \$88 | \$107 | \$117 | \$0 | \$0 | \$122 | \$100 | \$149 |
| WEIGHTED AVG PRICE PER SQ FT | \$94 | | | \$115 | | | \$121 | | |
| MEDIAN PRICE PER SQ FT | \$95 | | | \$117 | | | \$122 | | |

| | 2000-2002 | 2002-2004 | 2000-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 23% | 5% | 29% | 7% |
| % change of weighted avg price/sq ft | 22% | 5% | 28% | 6% |
| % change of median price/sq ft | 23% | 5% | 29% | 7% |
| % change of sales prices | 22% | 6% | 29% | 7% |

Case Study 13: Mount Laurel

Mount Laurel is approximately 15 miles southeast of central Birmingham in Shelby County, Alabama. Mount Laurel's residential units were built as early as 2001. Forest Parks was selected as the comparable community. Its oldest homes date to 1998. Due to the youth of Mount Laurel, there were no resales in the community before 2003. Consequently, this study compared resales from 2003, 2004, and 2005. Both developments contain single-family detached homes only.

Project Websites

Mount Laurel: <http://www.mtlaurel.com/>

Forest Parks: No website found.

Smart Growth Community Description: Mount Laurel

Project Summary

Mount Laurel is a development that has tried to replicate qualities of small-town life through the application of smart growth principles. At build-out, it will comprise 6,000 acres with retail, civic uses, and a blend of residential products that will include townhouses, single-family detached residences, apartments, and live/work spaces. This study focused on the first 442-acre phase containing 550 single-family houses.

Location

Mount Laurel is approximately 30 minutes by car from downtown Birmingham. It is near Oak Mountain State Park, and four golf courses and country clubs are in its immediate vicinity. The community includes one public and one private elementary school and is near the Chelsea Middle and High schools.

Home Characteristics

Homes in Mount Laurel can be one of several architectural styles: Craftsman, Charleston, or Cottage. The community's design team must approve all other types of home plans. Most of the homes are on small lots of less than half an acre. There are alleys throughout the community and fences for privacy. Most of the homes have detached two-car garages that are connected to the houses by covered walkways. Some of the garages have studio space above.

Community Amenities

Mount Laurel has three parks and an 11-acre lake for fishing. It has a community pool, hiking trails, and red brick sidewalks. Tennis courts are under construction, and a golf course may be added in the future. The development has a town center, which will total 160,000 square feet of commercial space at build-out. The town center has two markets, a hardware store, a fitness club, a bookstore, and several dining establishments. There are also dentist and physician practices in the center. The homeowners' association fee is \$1,000 per year, which covers the maintenance of all common areas, including the pool, lake, tennis courts, streetlights, and sidewalks. The community has its own fire department.

Conventional Suburban Community Description: Forest Parks

Project Summary

Forest Parks is a conventional suburban community southeast of Mount Laurel in Sterrett, Alabama. It contains approximately 300 multi-level homes on half-acre lots.

Location

Since the community is immediately south of Mount Laurel, it has identical access to central Birmingham and amenities in the southeastern portion of the metropolitan area. School-aged children that reside in Forest Parks attend either Mount Laurel or Chelsea Elementary and Chelsea Middle and High schools.

Home Characteristics

Most of the homes have brick-side exterior on all sides of the house. There are some dwellings that have a combination of brick and vinyl siding exteriors. All of the homes have attached two-car garages either in the basement or on the main level with entrances on the side or back of the home. None of the garages face the street.

Community Amenities

There are cement sidewalks and landscaped common areas. Homeowners' association fees are \$175 yearly. This fee covers maintenance and landscaping of the common areas. There are no common recreational facilities in Forest Parks.

Resale Performance Comparison: Mount Laurel and Forest Parks

This case study was unusual because Mount Laurel reported very few resales. There were just seven resales in 2003, 2004, and 2005 combined. The comparable community had a 51 resales. From the data gathered, it appears that the CAGR for Mount Laurel is -2 percent, while the conventional suburban community has a CAGR of 9 percent. The number of resales within Mount Laurel is simply too small to draw any conclusions.

Top Performer: None. The number of resales in the smart growth community is too small to draw a conclusion.

**SMART GROWTH SFD HOMES
MT LAUREL**

| | 2003 (N = 1) | | | 2004 (N = 4) | | | 2005 (N = 2) | | |
|-------------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$389,000 | \$389,000 | \$389,000 | \$359,875 | \$280,000 | \$550,000 | \$348,750 | \$287,500 | \$410,000 |
| Living Area in SF | 2,888 | 2,888 | 2,888 | 2,994 | 2,477 | 4,422 | 2,686 | 2,462 | 2,910 |
| Lot Size in Square Feet | 5,126 | 5,126 | 5,126 | 5,400 | 4,644 | 6,804 | n/a | n/a | n/a |
| Year Built | 2001 | 2001 | 2001 | 2002 | 2001 | 2002 | 2002 | 2001 | 2003 |
| Age of Home when sold | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 4 |
| Annual Property Tax Amount | \$1,109 | \$1,109 | \$1,109 | \$1,676 | \$1,121 | \$2,342 | \$1,472 | \$1,472 | \$1,472 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | \$135 | \$135 | \$135 | \$119 | \$113 | \$125 | \$129 | \$117 | \$141 |
| WEIGHTED AVG PRICE PER SQ FT | \$135 | | | \$120 | | | \$130 | | |
| MEDIAN PRICE PER SQ FT | \$135 | | | \$120 | | | \$129 | | |

| | 2003-2004 | 2004-2005 | 2003-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | -11% | 8% | -4% | -2% |
| % change of weighted avg price/sq ft | -11% | 8% | -4% | -2% |
| % change of median price/sq ft | -11% | 8% | -4% | -2% |
| % change of sales prices | -7% | -3% | -10% | -5% |

**CONVENTIONAL SFD HOMES
FOREST PARKS**

| | 2003 (N = 16) | | | 2004 (N = 13) | | | 2005 (N = 22) | | |
|-------------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$257,228 | \$193,000 | \$304,900 | \$254,215 | \$206,000 | \$317,500 | \$278,400 | \$206,900 | \$407,000 |
| Living Area in SF | 3,232 | 2,415 | 3,861 | 2,873 | 2,198 | 3,882 | 2,943 | 1,867 | 4,042 |
| Lot Size in Square Feet | 20,340 | 16,000 | 30,420 | 20,403 | 15,500 | 34,000 | 21,982 | 10,800 | 36,240 |
| Year Built | 1999 | 1998 | 2000 | 2000 | 1997 | 2004 | 1999 | 1997 | 2002 |
| Age of Home when sold | 4 | 3 | 5 | 4 | - | 7 | 6 | 3 | 8 |
| Annual Property Tax Amount | \$1,069 | \$727 | \$1,227 | \$874 | \$665 | \$1,220 | \$1,116 | \$736 | \$2,155 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | \$80 | \$65 | \$96 | \$86 | \$76 | \$102 | \$95 | \$78 | \$115 |
| WEIGHTED AVG PRICE PER SQ FT | \$80 | | | \$105 | | | \$95 | | |
| MEDIAN PRICE PER SQ FT | \$80 | | | \$87 | | | \$94 | | |

| | 2002-2003 | 2003-2004 | 2002-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 8% | 10% | 18% | 9% |
| % change of weighted avg price/sq ft | 31% | -10% | 19% | 9% |
| % change of median price/sq ft | 8% | 8% | 17% | 8% |
| % change of sales prices | -1% | 10% | 8% | 4% |

Case Study 14: Orenco Station

Orenco Station is in Hillsboro, Oregon, approximately 15 miles from downtown Portland. The community includes single-family detached homes, townhouses, and condominiums and had its first homes completed in 1997. A local broker was selected and Jones Farm, a conventional suburb in the immediate vicinity with single-family detached homes built as early as 1997, was identified as the market comparable. Home resales were analyzed for the years 2000, 2002, and 2004. The broker attempted to gather data for 1998, but there were no resales in that year. The broker was unable to find a townhouse community to compare with Orenco Station's townhouses. This study thus includes data on single-family detached dwellings only.

Project Websites

Orenco Station: <http://www.orencostation.net/>

Jones Farm: <http://jonesfarmhoa.org/>

Smart Growth Community Description: Orenco Station

Project Summary

Orenco Station is a 190-acre master-planned development with a commercial town center, a light-rail station, and five acres of parks. The project anticipates 1,850 housing units upon full build-out, distributed in lofts, condominiums, townhouses, cottages, row homes, and live-work units.

Location

Orenco Station is connected with downtown Portland by the light-rail line and is across the street from a major employer. It is west of the Hillsboro airport and has easy access to Route 26, from which the entire metro area can be accessed. The project is served by West Union Elementary School, Poynter Middle School, and Liberty High School. There are wetlands and two public parks nearby.

Home Characteristics

Lot sizes in Orenco Station tend to be small, between 3,000 square feet and 4,000 square feet, and homes resemble the cottages, bungalows, and contemporary houses found in Hillsboro and Portland. The two primary demographic groups that are drawn to the community are empty nesters, who generally prefer single-story floor plans, and young professionals without children, who prefer the high-end condominiums.

Community Amenities

One major amenity for the development is the town center, which provides retail, restaurant, and entertainment opportunities within walking distance of the residential areas. Another major amenity is the TriMet MAX Blue Line light-rail station located at the entrance of the project. The light rail provides a direct link between Portland and Hillsboro. The community has a new high school within its boundaries. While the school had not been operational long enough to be rated during the 2005 study, the broker asserts that most buyers have the impression that it will be better than the older high school.

Conventional Suburban Community Description: Jones Farm

Project Summary

Jones Farm is a conventional suburban development that contains 470 single-family detached homes in six subdivisions. The project layout provides an interconnected street and block network with a central park that connects to a regional wetlands preserve.

Location

Jones Farm is very close to Orenco Station and is also across the street from the same major employer. It is immediately northwest of the Hillsboro airport and a few minutes' drive from shops and restaurants. Two

city parks and preserved wetlands are nearby. The development is a short drive from the light-rail station at Orenco Station. The Jackson School District serves the community.

Home Characteristics

The houses in Jones Farm tend to be family-oriented and have three or four bedrooms. Various builders have constructed the community. As a result, the quality of construction varies dramatically. Some homes were built with lower-end finishes such as vinyl siding, laminate counters, and low-end carpet. Other homes feature high-end finishes both inside and outside. Many households are families with wage earners that work for firms in technology and related industries. The lower-end homes are often used as rental properties, which the broker believes devalues the community.

Community Amenities

Jones Farm provides extensive park and green space areas throughout the community, including one park with a large play area for children. The community does not have any retail or commercial amenities within its boundaries.

Resale Performance Comparison: Orenco Station and Jones Farm

Orenco Station's CAGR between 2000 and 2004 was 2 percent, less than that of Jones Farm, which was 3 percent. The communities had a moderate number of resales. In Orenco Station, 25 homes were resold in 2000, 2002, and 2004. In Jones Farm, 71 homes were resold in the same years. On average, the communities were nearly identical in terms of square footages, lot sizes, house ages, and homeowners' association fees. Yet Orenco Station's resales cost substantially more per square foot than those of Jones Farm in all years for which data were evaluated. According to the broker, Orenco Station's single-level homes that appeal to empty nesters have continually appreciated in value. The multi-story homes that appeal to young professionals fluctuate in value according to the health of the local economy and the health of the adjacent office employer. The characteristics of the two developments indicate that they are well-matched comparables. Despite their nearly identical appreciation rates, the conventional suburban community is the top performer by a very slight difference in CAGR.

Top Performer: Conventional suburban development community

**SMART GROWTH SFD HOMES
ORENCO STATION**

| | 2000 (N = 3) | | | 2002 (N = 12) | | | 2004 (N = 10) | | |
|------------------------------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$269,267 | \$220,900 | \$301,900 | \$267,346 | \$191,250 | \$339,000 | \$303,950 | \$226,500 | \$360,000 |
| Living Area in SF | 1,864 | 1,427 | 2,225 | 1,752 | 1,208 | 2,294 | 1,966 | 1,463 | 2,400 |
| Lot Size in Square Feet | n/a | n/a | n/a | 3,955 | 3,360 | 4,356 | 4,519 | 3,485 | 6,970 |
| Year Built | 1998 | 1998 | 1998 | 1999 | 1998 | 2001 | 1999 | 1998 | 2001 |
| Age of Home when sold | 2 | 2 | 2 | 3 | 1 | 4 | 5 | 3 | 6 |
| Annual Property Tax Amount | \$2,390 | \$2,273 | \$2,596 | \$2,745 | \$2,000 | \$3,282 | \$3,057 | \$2,715 | \$3,370 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$312 | \$312 | \$312 | \$474 | \$276 | \$1,464 | \$518 | \$480 | \$552 |
| PRICE PER SQUARE FOOT | \$146 | \$136 | \$155 | \$154 | \$139 | \$169 | \$155 | \$148 | \$177 |
| WEIGHTED AVG PRICE PER SQ FT | \$144 | | | \$153 | | | \$155 | | |
| MEDIAN PRICE PER SQ FT | \$147 | | | \$153 | | | \$154 | | |

| | 2000-2002 | 2002-2004 | 2000-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 5% | 1% | 7% | 2% |
| % change of weighted avg price/sq ft | 6% | 1% | 7% | 2% |
| % change of median price/sq ft | 4% | 1% | 5% | 1% |
| % change of sales prices | -1% | 14% | 13% | 3% |

**CONVENTIONAL SFD HOMES
JONES FARM**

| | 2000 (N = 6) | | | 2002 (N = 20) | | | 2004 (N = 45) | | |
|------------------------------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$214,608 | \$199,900 | \$234,950 | \$213,173 | \$154,500 | \$278,500 | \$226,072 | \$165,000 | \$330,000 |
| Living Area in SF | 2,056 | 1,882 | 2,542 | 1,926 | 1,215 | 2,695 | 1,883 | 1,222 | 2,695 |
| Lot Size in Square Feet | 6,011 | 5,663 | 6,534 | 5,953 | 2,613 | 9,583 | 4,853 | 2,484 | 11,761 |
| Year Built | 1997 | 1997 | 1998 | 1998 | 1996 | 2000 | 1999 | 1997 | 2001 |
| Age of Home when sold | 3 | 2 | 3 | 4 | 2 | 6 | 5 | 3 | 7 |
| Annual Property Tax Amount | \$2,257 | \$2,046 | \$2,597 | \$2,314 | \$500 | \$3,018 | \$2,508 | \$1,722 | \$3,582 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$468 | \$412 | \$672 | \$673 | \$226 | \$1,944 | \$524 | \$240 | \$1,272 |
| PRICE PER SQUARE FOOT | \$105 | \$90 | \$111 | \$112 | \$95 | \$128 | \$120 | \$101 | \$141 |
| WEIGHTED AVG PRICE PER SQ FT | \$104 | | | \$111 | | | \$120 | | |
| MEDIAN PRICE PER SQ FT | \$107 | | | \$111 | | | \$120 | | |

| | 2000-2002 | 2002-2004 | 2000-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|------|
| % change of price per square foot | 7% | 8% | 15% | 3% |
| % change of weighted avg price/sq ft | 6% | 8% | 15% | 4% |
| % change of median price/sq ft | 4% | 8% | 13% | 3% |
| % change of sales prices | -1% | 6% | 5% | 1% |

Case Study 15: Southern Village

Southern Village is a smart growth development in Chapel Hill, North Carolina. Construction of the community's residences began in 1995. A residential real estate broker who has substantial experience with the local real estate market was hired to select Southern Village's market counterpart, gather MLS data, and provide community descriptions. Lake Hogan Farms was selected as the comparable conventional suburban community. Its homes were constructed as early as 1996. Resales in consecutive years from 2001 through 2004 were examined. Southern Village contains some attached dwelling units. Although Lake Hogan Farms has townhouses under construction, there is no development that functions as a market counterpart for the townhouses. As such, this case study considers only single-family detached houses.

Project Websites

Southern Village: <http://www.southernvillage.com/>

Lake Hogan Farms: <http://www.lakehoganfarms.info/>

Smart Growth Community Description: Southern Village

Project Summary

Southern Village is a 312-acre mixed-use development with 1,200 housing units that was designed to mirror historic walking communities and has a gridded street network. At the time of this study, it was the best-selling development in the Raleigh/ Durham/ Chapel Hill region. The community was developed by a local developer and designed by a regional design firm. Both are award-winning firms based in North Carolina with more than 20 years of experience.

Location

Southern Village is three miles south of downtown Chapel Hill. It is 14 miles from Durham, 20 miles from Raleigh-Durham International Airport, and 35 miles from central Raleigh. Several highly ranked higher education institutions are nearby, including the University of North Carolina at Chapel Hill and Duke University. Southern Village is in the Chapel Hill-Carrboro City School District, which often ranks as one of the best school districts in the nation.

Home Characteristics

Homes in Southern Village have been designed with a diversity of sizes, prices, and architectural styles. The homes feature high-quality finishes. Many homes have front porches to encourage neighbor interaction. Rear alleys are used for mail delivery, garage access, and trash collection.

Community Amenities

The community contains numerous retail and service businesses, including a grocery store, bookstore, fitness center, bank, and a movie theater with stadium seating. Other amenities include multiple restaurants, an elementary school, and a middle school. The community has a playground, bike and jogging trails, and a small lake for fishing and recreation. A swim and racquet club membership can be purchased for an additional fee.

Conventional Suburban Community Description: Lake Hogan Farms

Project Summary

Lake Hogan Farms is a 300-acre conventional suburban community in Carrboro, North Carolina. According to the broker, this is the one neighborhood that buyers who are considering Southern Village

also typically want to view. The project has single-family houses and townhouses as large as 3,000 square feet. The community has curvilinear streets and cul-de-sacs.

Location

Lake Hogan Farms is five miles northwest of downtown Chapel Hill. It is 15 miles from downtown Durham, 25 miles from Raleigh-Durham International Airport, and 40 miles from central Raleigh. The neighborhood is served by Chapel Hill-Carrboro City Schools, the same district used by children residing in Southern Village.

Home Characteristics

Lake Hogan Farms contains homes of similar quality to Southern Village. The development includes a range of home sizes, from small-lot detached courtyard homes to larger-lot estate-style homes. However, in Lake Hogan Farms, the homes are segregated by home type and price point, not integrated with one another like the homes are in Southern Village. Lake Hogan Farms' homes have front-facing garages and are being constructed by multiple builders, including two local homebuilders and one large regional production homebuilder.

Community Amenities

While there are currently no commercial amenities in Lake Hogan Farms, the community's recreational amenities are comparable to those in Southern Village. The community includes 95 acres of open space. Lake Hogan Farms' residents have access to playgrounds, biking and jogging trails, and a lake for fishing that is larger than the one in Southern Village. There is also a swim and tennis club that residents can use.

Resale Performance Comparison: Southern Village and Lake Hogan Farms

Between 2001 and 2004, 186 resales occurred in Southern Village, with prices per square foot appreciating 8 percent annually. In Lake Hogan Farms, the CAGR of homes resold was 4 percent, which was calculated through analysis of 54 home sales records. The communities' homes were similar in age and square foot ranges and averages, especially in the last two years of the case study. Lot sizes tended to be larger in the conventional suburban community. The homes started out at nearly identical prices per square foot, indicating that their resale performance will be an accurate measure of appreciation over time. As Southern Village's CAGR substantially exceeds that of Lake Hogan, Southern Village is the obvious top performer in this case study.

Top Performer: Smart growth community

**SMART GROWTH SF HOMES
SOUTHERN VILLAGE**

| | 2001 (N = 30) | | | 2002 (N = 41) | | | 2003 (N = 61) | | | 2004 (N = 54) | | |
|------------------------------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$324,663 | \$240,000 | \$490,000 | \$359,310 | \$263,500 | \$590,000 | \$401,332 | \$276,000 | \$580,000 | \$467,850 | \$300,000 | \$875,000 |
| Living Area in SF | 2,576 | 1,859 | 3,669 | 2,724 | 1,870 | 4,343 | 2,829 | 1,874 | 4,180 | 2,962 | 1,806 | 5,000 |
| Lot Size in Square Feet | 7,496 | \$3,920 | \$16,988 | 7,371 | 4,356 | 18,295 | 8,038 | 4,356 | 16,553 | 7,759 | 1,742 | 15,246 |
| Year Built | 1997 | 1995 | 2000 | 1998 | 1995 | 2001 | 1999 | 1995 | 2002 | 1999 | 1995 | 2002 |
| Age of Home when sold | 4 | 1 | 6 | 4 | 1 | 7 | 4 | 1 | 8 | 5 | 2 | 9 |
| Annual Property Tax Amount | \$3,561 | \$2,176 | \$4,921 | \$4,742 | \$2,038 | \$11,266 | \$4,863 | \$3,261 | \$8,033 | \$5,289 | \$3,305 | \$11,368 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$198 | \$108 | \$1,440 | \$141 | \$108 | \$168 | \$216 | \$120 | \$1,908 | \$225 | \$159 | \$950 |
| PRICE PER SQUARE FOOT | \$126 | \$106 | \$145 | \$132 | \$106 | \$171 | \$142 | \$114 | \$183 | \$158 | \$119 | \$231 |
| WEIGHTED AVG PRICE PER SQ FT | \$126 | | | \$132 | | | \$142 | | | \$158 | | |
| MEDIAN PRICE PER SQ FT | \$125 | | | \$134 | | | \$143 | | | \$152 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 5% | 7% | 11% | 26% | 8% |
| % change of weighted avg price/sq ft | 5% | 8% | 11% | 25% | 8% |
| % change of median price/sq ft | 7% | 7% | 7% | 22% | 7% |
| % change of sales prices | 11% | 12% | 17% | 44% | 13% |

**CONVENTIONAL SF HOMES
LAKE HOGAN**

| | 2001 (N = 7) | | | 2002 (N = 6) | | | 2003 (N = 15) | | | 2004 (N = 26) | | |
|------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$379,857 | \$250,000 | \$587,000 | \$309,250 | \$260,000 | \$425,000 | \$392,960 | \$244,500 | \$665,000 | \$471,915 | \$267,500 | \$860,000 |
| Living Area in SF | 2,981 | 1,940 | 3,550 | 2,358 | 2,002 | 2,793 | 2,855 | 1,726 | 4,250 | 3,200 | 1,746 | 4,817 |
| Lot Size in Square Feet | 16,366 | 6,098 | 35,719 | 11,761 | 6,534 | 15,246 | 16,350 | 5,227 | 41,382 | 17,476 | 5,227 | 46,609 |
| Year Built | 1998 | 1996 | 1998 | 1999 | 1996 | 2000 | 2000 | 1996 | 2002 | 2001 | 1996 | 2003 |
| Age of Home when sold | 4 | 3 | 5 | 4 | 2 | 6 | 3 | 1 | 7 | 3 | 1 | 8 |
| Annual Property Tax Amount | \$5,679 | \$3,989 | \$7,517 | \$4,807 | \$3,799 | \$6,187 | \$5,497 | \$3,520 | \$8,866 | \$6,175 | \$3,785 | \$11,906 |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$650 | \$648 | \$660 | \$660 | \$660 | \$660 | \$660 | \$660 | \$660 | \$660 | \$660 | \$660 |
| PRICE PER SQUARE FOOT | \$127 | \$92 | \$175 | \$131 | \$115 | \$157 | \$137 | \$121 | \$162 | \$145 | \$113 | \$197 |
| WEIGHTED AVG PRICE PER SQ FT | \$127 | | | \$131 | | | \$138 | | | \$147 | | |
| MEDIAN PRICE PER SQ FT | \$132 | | | \$129 | | | \$138 | | | \$145 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 3% | 5% | 6% | 14% | 4% |
| % change of weighted avg price/sq ft | 3% | 5% | 7% | 16% | 5% |
| % change of median price/sq ft | -2% | 7% | 5% | 10% | 3% |
| % change of sales prices | -19% | 27% | 20% | 24% | 8% |

Case Study 16: Town of Tioga

Town of Tioga is an award-winning smart growth development in Newberry, Florida. Residential construction began in the development in 1997. The community contains single-family detached residences. Rental units are found in the town center, which was under construction in 2005. Due to changes in the regional MLS system, brokers could not provide the needed MLS records. Consequently, to obtain the quantitative data for this study, a Florida-based real estate data provider was selected. Qualitative data were provided by real estate brokers that partnered with the Florida-based real estate firm. Cambridge Forest was selected as an appropriate conventional suburban counterpart. Cambridge Forest contains single-family detached homes, which were constructed beginning in 1992. Due to the youth of Town of Tioga, data were gathered for resales in consecutive years from 2001 through 2004.

Project Websites

Town of Tioga: <http://www.townoftioga.com/>
Cambridge Forest: No website found.

Smart Growth Community Description: Town of Tioga

Project Summary

Town of Tioga is a 280-acre development envisioned as a walkable community with 573 housing units of various types. Developers have sought to use land and resources more efficiently than in conventional suburban developments by preserving open space and mixing commercial and residential land uses.

Location

Town of Tioga is five minutes west of Interstate 75. It is ten miles west of central Gainesville and six miles from the University of Florida. Town of Tioga's school-aged children attend Hidden Oak Elementary, Kanapaha Middle School, and Buchholz High School.

Home Characteristics

Six local builders were selected by the developer to build the project. The builders were chosen for their attention to detail and reputation for exceptional craftsmanship and have slightly different styles, which are reflected in homes. The housing styles convey an old Southern charm that showcases Plantation, Charleston Singles, and Caribbean-style homes. Common elements of the community's homes include exteriors made of siding and usable front porches, sweeping balconies, and grand verandas. Some homes in Town of Tioga have partial brick façades.

Community Amenities

The homes in the community are a short walk from Tioga Town Center, which contains a mix of stores and service businesses including restaurants, a bookstore, a fitness center, a bank, and a preschool. Town of Tioga is also home to a playground, lighted tennis and basketball courts, and a community pool. The town hall is another amenity, as it is used as a meeting space for community events and parties hosted by residents. Tioga Creek, which affords residents easy access to nature, runs through the town. Pedestrian-friendly paths are the norm throughout the community.

Conventional Suburban Community Description: Cambridge Forest

Project Summary

Cambridge Forest is a community comprised of single-family detached houses on approximately 110 acres, four miles from Town of Tioga, that was designed and built with conventional suburban standards. Cul-de-

sacs off ring roads surround two small lakes in the center of the project. There are no sidewalks in the project.

Location

The location of Cambridge Forest is comparable to Town of Tioga. It is ten miles from central Gainesville and seven miles from the University of Florida. It is within a short drive of major shopping opportunities, including a shopping center with neighborhood retailers, national anchors, and national big-box retailers. Like Town of Tioga, the project is located within the Alachua County Public School District but, as multiple school zones cover the project, local brokers could not identify the exact public schools associated with Cambridge Forest.

Home Characteristics

Homes in Cambridge Forest have large setbacks. Most homes are single story, and some have small front porches and private swimming pools. Upscale home features are the norm, including specialty flooring and security systems. Two-car garages are standard, and most of them can be accessed from the side of the house, making the garage more hidden than is typical in suburban developments. Cambridge Forest is part of a program that conducts research to improve energy efficiency in new and existing houses. The community is thus on the cutting edge of energy efficiency, which is an amenity for residents because their energy costs are typically lower than in standard suburban dwellings.

Community Amenities

Cambridge Forest has few amenities. Houses are nestled between mature trees that add privacy to each house. Although there are no sidewalks in the project, there are several walking paths leading to the two lakes in the center of the project.

Resale Performance Comparison: Town of Tioga and Cambridge Forest

The CAGR of price per square foot for homes sold between 2001 and 2004 was 9 percent in Town of Tioga, larger than the 8 percent CAGR found in Cambridge Forest in the same time frame. The analysis included 33 resales in Town of Tioga and 53 in Cambridge Forest. On average, Cambridge Forest's homes were older, slightly larger, and selling at somewhat higher price points. Thus buyers in Town of Tioga were able to obtain smaller homes for less money at similar prices per square foot. Though by a slight difference, the smart growth community is the top performer for this case study.

Top Performer: Smart growth community

**SMART GROWTH SF HOMES
TOWN OF TIOGA**

| | 2001 (N = 3) | | | 2002 (N = 7) | | | 2003 (N = 9) | | | 2004 (N = 14) | | |
|--|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$261,833 | \$240,000 | \$277,500 | \$260,500 | \$202,000 | \$310,000 | \$334,744 | \$282,900 | \$415,000 | \$338,529 | \$248,000 | \$516,000 |
| Square Footage (Effective Adjusted) | 2,984 | 2,694 | 3,274 | 3,156 | 2,512 | 3,922 | 3,268 | 2,532 | 4,081 | 3,134 | 2,204 | 4,677 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1998 | 1997 | 1999 | 1998 | 1997 | 2000 | 2000 | 1997 | 2002 | 2001 | 1997 | 2003 |
| Age of Home when sold | 3 | 2 | 4 | 4 | 2 | 5 | 3 | 1 | 6 | 3 | 1 | 7 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | \$85 | \$82 | \$89 | \$86 | \$76 | \$106 | \$103 | \$85 | \$118 | \$112 | \$92 | \$144 |
| WEIGHTED AVG PRICE PER SQ FT | \$88 | | | \$83 | | | \$102 | | | \$108 | | |
| MEDIAN PRICE PER SQ FT | \$85 | | | \$84 | | | \$108 | | | \$113 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 1% | 20% | 8% | 31% | 9% |
| % change of weighted avg price/sq ft | -6% | 24% | 5% | 23% | 7% |
| % change of median price/sq ft | -1% | 28% | 4% | 32% | 10% |
| % change of sales prices | -1% | 29% | 1% | 29% | 9% |

**CONVENTIONAL SF HOMES
CAMBRIDGE FOREST**

| | 2001 (N = 9) | | | 2002 (N = 14) | | | 2003 (N = 12) | | | 2004 (N = 8) | | |
|---|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|--------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$306,811 | \$232,000 | \$408,000 | \$322,571 | \$259,100 | \$420,000 | \$396,875 | \$299,500 | \$540,000 | \$399,675 | \$302,900 | \$535,000 |
| Living Area in SF (Effective Adjusted) | 3,301 | 2,819 | 4,119 | 3,331 | 2,756 | 3,833 | 3,543 | 2,900 | 4,406 | 3,497 | 2,679 | 4,749 |
| Lot Size in Square Feet | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year Built | 1996 | 1992 | 1999 | 1998 | 1994 | 2003 | 2000 | 1992 | 2002 | 1997 | 1992 | 2002 |
| Age of Home when sold | 5 | 2 | 9 | 4 | -1 | 8 | 3 | 1 | 11 | 7 | 2 | 12 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| PRICE PER SQUARE FOOT | \$90 | \$77 | \$99 | \$97 | \$68 | \$117 | \$111 | \$103 | \$123 | \$114 | \$105 | \$126 |
| WEIGHTED AVG PRICE PER SQ FT | \$93 | | | \$97 | | | \$112 | | | \$114 | | |
| MEDIAN PRICE PER SQ FT | \$90 | | | \$97 | | | \$110 | | | \$113 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 9% | 15% | 3% | 28% | 8% |
| % change of weighted avg price/sq ft | 4% | 16% | 2% | 23% | 7% |
| % change of median price/sq ft | 8% | 13% | 3% | 25% | 8% |
| % change of sales prices | 5% | 23% | 1% | 30% | 9% |

Case Study 17: Vermillion

Vermillion is a smart growth development in Huntersville, North Carolina, in the Charlotte metropolitan area. Vermillion's first dwellings were constructed in 1999. A broker with extensive knowledge about Vermillion and its market comparables was chosen to select a comparable community, gather MLS data on residential resales, and describe the characteristics of the communities that would affect home values. McGinnis Village, a development of single-family homes that were constructed as early as 1998, was selected as the conventional suburban development market comparable. Due to the age of the two communities, data were gathered on resales from 2001 through 2004. The lack of townhouse market counterparts means that only single-family detached dwellings are considered in this study.

Project Websites

Vermillion: <http://www.newvermillion.com/>

McGinnis Village: No website found.

Smart Growth Community Description: Vermillion

Project Summary

The 350-acre Vermillion community is a traditional walkable neighborhood with modern conveniences. At the time of this study, only Phase One, which contains 130 townhouses and 50 single-family homes on approximately 30 acres, had been completed. Additional phases of development will include 31,000 square feet of office and retail in a mixed-use program. A bus stop is also planned.

Location

The development is a short walk or bike ride from historic downtown Huntersville. It is one mile from Interstate 77, which provides access to regional amenities. Shopping opportunities include a regional shopping mall as well as the shops at Birkdale Village. Vermillion's homes pay Mecklenburg County taxes and Huntersville town taxes. Blythe Elementary School, Bradley Middle School, and North Mecklenburg High School all service the community.

Home Characteristics

Multiple builders are constructing the community. The architectural style and building materials are consistent throughout the development, using contemporary and traditional styles, with brick and fiber cement siding. Many homes have porches with columns.

Community Amenities

Sidewalks are continuous throughout the development, creating a neighborhood that is pedestrian friendly. Mailboxes are in a central location to encourage walking and a greater sense of community among residents. The town square includes a neighborhood restaurant surrounded by townhouses and live/work units. The community also includes several miles of wooded forests, multiple playgrounds, an outdoor pavilion, a pool, and neighborhood gathering places.

Conventional Suburban Community Description: McGinnis Village

Project Summary

McGinnis Village is an approximately 40-acre community featuring single-family detached homes designed and built according to conventional suburban development standards. It contains approximately 70 homes, many of which are on cul-de-sacs.

Location

McGinnis Village is close to job opportunities, including the Lowe's Motor Speedway, national banking headquarters, and shopping centers. The project is within walking distance of shopping; however, there are no sidewalks connecting the community with the retail center. The property tax rates and schools that service the community are identical to those of Vermillion.

Home Characteristics

The homes in McGinnis Village range from 1,800 square feet to 3,000 square feet and are on lots sized between one-third and one-half acre. The houses have two-car garages with front entries. Homes have shutters and are constructed in full brick, full vinyl siding, or vinyl siding with brick façades. Some of the homes have small front porches.

Community Amenities

The development has a community pool, but no other major amenities.

Resale Performance Comparison: Vermillion and McGinnis Village

The CAGR of average price per square foot of homes in Vermillion between 2001 and 2004 was just 1 percent. That rate of increase, though slight, was greater than that of McGinnis Village, which saw a 0 percent CAGR over the course of the same years. Vermillion had 92 resales, while its market comparable had just 22. On average, McGinnis Village's resold homes were older, larger in square footage and lot size, and slightly higher in price. Thus sellers in Vermillion were able to obtain higher prices per square foot. Despite the nearly identical appreciation rates, the smart growth community is the top performer by a very slight difference in CAGR.

Top Performer: Smart growth community

**SMART GROWTH SFD HOMES
VERMILLION**

| | 2001 (N = 2) | | | 2002 (N = 11) | | | 2003 (N = 36) | | | 2004 (N = 43) | | |
|------------------------------|--------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$175,667 | \$149,500 | \$227,500 | \$199,800 | \$181,000 | \$233,500 | \$164,620 | \$140,900 | \$195,000 | \$168,279 | \$124,500 | \$242,500 |
| Living Area in SF | 1,884 | 1,496 | 2,404 | 2,047 | 1,748 | 2,216 | 1,756 | 1,502 | 2,072 | 1,751 | 1,214 | 2,591 |
| Lot Size in Square Feet | n/a | n/a | n/a | 6,534 | 4,356 | 8,712 | 4,888 | 4,356 | 5,227 | 7,260 | 4,356 | 17,424 |
| Year Built | 2000 | 2000 | 2000 | 2000 | 1999 | 2001 | 2002 | 1999 | 2003 | 2001 | 1999 | 2004 |
| Age of Home when sold | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 0 | 4 | 3 | 0 | 5 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$240 | \$240 | \$240 | \$273 | \$240 | \$340 | \$324 | \$240 | \$360 | \$320 | \$240 | \$360 |
| PRICE PER SQUARE FOOT | \$93 | \$86 | \$100 | \$98 | \$82 | \$107 | \$94 | \$81 | \$106 | \$97 | \$84 | \$112 |
| WEIGHTED AVG PRICE PER SQ FT | \$93 | | | \$98 | | | \$94 | | | \$96 | | |
| MEDIAN PRICE PER SQ FT | \$95 | | | \$106 | | | \$94 | | | \$97 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | 5% | -4% | 3% | 4% | 1% |
| % change of weighted avg price/sq ft | 5% | -4% | 3% | 3% | 1% |
| % change of median price/sq ft | 12% | -11% | 3% | 3% | 1% |
| % change of sales prices | 14% | -18% | 2% | -4% | -1% |

**CONVENTIONAL SFD HOMES
McGinnis Village**

| | 2001 (N = 4) | | | 2002 (N = 3) | | | 2003 (N = 5) | | | 2004 (N = 10) | | |
|------------------------------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|---------------|-----------|-----------|
| | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum |
| Sales Price | \$166,850 | \$165,500 | \$167,900 | \$179,067 | \$162,500 | \$197,000 | \$191,480 | \$154,900 | \$210,000 | \$201,790 | \$171,000 | \$232,000 |
| Living Area in SF | 2,202 | 2,140 | 2,245 | 2,424 | 2,193 | 2,686 | 2,629 | 2,150 | 2,886 | 2,677 | 2,309 | 2,900 |
| Lot Size in Square Feet | 9,910 | 9,148 | 10,890 | 9,293 | 9,148 | 9,583 | 11,500 | 9,148 | 18,731 | 11,932 | 9,100 | 19,602 |
| Year Built | 1999 | 1998 | 2000 | 1998 | 1998 | 1998 | 1999 | 1998 | 2000 | 1999 | 1998 | 2000 |
| Age of Home when sold | 2 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 5 | 5 | 4 | 6 |
| Annual Property Tax Amount | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| County/State | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Special Assessments | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Annual HOA Fees | \$402 | \$372 | \$432 | \$347 | \$200 | \$420 | \$423 | \$420 | \$432 | \$544 | \$430 | \$840 |
| PRICE PER SQUARE FOOT | \$76 | \$75 | \$77 | \$74 | \$73 | \$74 | \$73 | \$71 | \$75 | \$75 | \$69 | \$84 |
| WEIGHTED AVG PRICE PER SQ FT | \$76 | | | \$74 | | | \$73 | | | \$75 | | |
| MEDIAN PRICE PER SQ FT | \$75 | | | \$74 | | | \$73 | | | \$75 | | |

| | 2001-2002 | 2002-2003 | 2003-2004 | 2001-2004 | CAGR |
|--------------------------------------|-----------|-----------|-----------|-----------|------|
| % change of price per square foot | -2% | -1% | 3% | -1% | 0% |
| % change of weighted avg price/sq ft | -3% | -1% | 4% | 0% | 0% |
| % change of median price/sq ft | -2% | -2% | 3% | 0% | 0% |
| % change of sales prices | 7% | 7% | 5% | 21% | 7% |