

**Where has Urban Sustainability Gone?
The Affordable Housing Gap in Smart Growth Development in the U.S.**

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Abstract

This research focuses on the role social equity has played in sustainable development since the 1990s using the inclusion of affordable housing as a metric. Through the collection and examination of 492 “sustainable” and “smart growth,” mixed-use developments it was identified that less than 40 percent included affordable housing. While this suggests that some progress has been made in the efforts to address social equity in development, it also indicates a significant disparity in the intended beneficiaries of sustainable development.

Introduction

Economic sustainability has been a given since the birth of capitalism. Environmental sustainability entered popular literature in the middle to late 1900s as the effects of environmental pollution and urban sprawl began to be noticed and drew considerable concern. Since the 1990s social sustainability, particularly in the forms of distributive justice and social equity, has gained prominence and is now a generally recognized part of sustainability’s definition. Building off of the work on sustainability and smart growth of Dr. Rob Krueger and Dr. David Gibbs, Dr. Nancy Green Leigh, Dr. Julian Agyeman, Dr. Philip R. Berke and Dr. Maria Manta Conroy, Dr. Tom Daniels, Dr. Robert W. Burchell, Dr. David Listokin, and Dr. Catherine C. Galley and the work on gentrification of Dr. Neil Smith, Dr. Lance Freeman, Dr. Loretta Lees, Dr. Tom Slater, Dr. Elvin Wyly, and Dr. Hamil Pearsall this work seeks to elucidate the importance and current state of social equity in sustainable-smart growth development by using affordable housing as a metric.

This paper begins with a brief history of sustainable development and smart growth. It makes the case for why affordable housing should be included as a measure of social equity in sustainable development, and goes on to cover the hypotheses, the methodology, and the results of this research. It concludes with several case studies and a discussion of the findings.

Background

What is sustainable development?

“The key to building sustainable communities - those that get better and stronger over time - will be to recognize that economic opportunity, ecological integrity, and social equity are interlocking links in the chain of well-being.” - (President's Council on Sustainable Development, 1993-1999)

Although there have been variations in the definition of sustainable development in the past two decades, most are grounded in the premise put forth by the United Nations’ Brundtland

Commission that sustainable development “meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development (Brundtland Commission), 1987).” In other words, it is finding and coming to an acceptable quality of life for all people that can be sustained indefinitely. Building off this idea, sustainable development has come to be understood in terms of three key spheres: the economic, the ecological, and the social (see Figure 1). For development to be truly sustainable it must support the vitality of each of these elements.

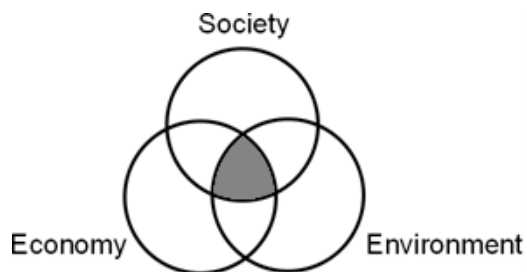


Figure 1. The Three Key Elements of Sustainability

When it comes to implementing sustainability in each of these elements, communities tend to focus on economic development, environmental protection, and transportation diversity. Their initiatives often include using resources more efficiently, reducing automobile traffic, encouraging bicycling and pedestrian activity, and the protection of open spaces. Many communities also look at housing and other community needs. For instance, the North Central Texas Council of Governments lists “Planning efforts which seek to balance access, finance, mobility, affordability, community cohesion, and environmental quality” as one of their three goals for sustainable development (North Central Texas Council of Governments).

In the past, development was narrowly focused on profitability, with limited concern for the environmental and societal impacts. The true costs, the externalities, of this development were not often considered, or at the very least, not acted upon until there were major catastrophes, deaths, or riots. Notable events in the history of environmental pollution include the Cuyahoga River catching fire the London smog damaging peoples’ lungs and causing thousands of deaths, and the American Dust Bowl where clouds of topsoil from over-tilled fields filled the air (Adler, 2003; Bell, Davis, & Fletcher, 2003; Worster, 2004). More recently, the United States has witnessed improperly dumped industrial waste contaminating the wells of Woburn, Massachusetts that lead to fatal cancers, deforestation causing massive landslides in the Pacific Northwest and pesticide spraying pushing species like the Bald Eagle toward extinction (Harr, 1996; Swanson & Dyrness, 1975; U.S. Environmental Protection Agency, 2011). Economic development also has a history of disregard for human life and well-being as evidenced by the burning of Triangle Shirtwaist Factory where seamstresses were locked inside and the suffering of mill workers and miners from occupational injuries and disease, to name a few (BBC; Kosak, 2009) . Many of these issues have been addressed through the development of environmental and occupational safety regulations. Nevertheless, they all point to the historical disparity of

development to address matters of environmental and societal protection.

With improved scientific understanding and the subsequent environmental legislation enacted in the 1960s, environmental impacts became a mandatory factor in the development process, at least for the federal government. By in large, states and local governments have adopted environmental protection laws as well (Kraft, 2006). While communities have been finding ways to protect habitats, reduce stormwater runoff, remove hazardous materials from old buildings, and clean up contaminated sites (all forms of environmental protection and considered progress towards sustainability) for the past fifty years, the examination of the societal impacts of development, particularly distribution of its burdens and benefits, has only just begun.

In the mid-1990s, the concept of environmental protection developed to include not only impacts of policies and development on the natural environment, but the impacts of policies and development on communities. In 1994, President Clinton issued Executive Order 12898 making the concept of environmental justice a part of federal policy. Environmental justice means ensuring that there is an equal distribution of the benefits of environmental policies as well as the burdens of development (U.S. Environmental Protection Agency, 2010). The EPA's Office of Environmental Justice describes it more thoroughly as:

...the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair Treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal environmental programs and policies (U.S. Environmental Protection Agency, 2009).

In development practice, environmental justice has taken several forms. For instance, environmental justice laws may prevent an energy plant from being built if the pollution were going to disproportionately impact a group of people based on the aforementioned factors. In terms of housing policy, environmental justice laws have changed the U.S. Department of Housing and Urban Development's approach to building low income housing. Rather than segregating large public housing projects from the rest of the community, where residents would have more equal access to municipal services and benefits, HUD now encourages mixed-income and dispersed affordable housing development. For the purposes of this paper, it is especially important to note that no income group should bear a disproportionate cost of governmental policies based on environmental justice law.

Urban sustainability in America: Smart Growth

So far, this paper has discussed the conceptual and historical origins of the call for sustainable development and some of the regulatory framework that guides development today.

However, the practice of sustainable development as it has occurred in the United States has its own unique history. About ten years after the Brundtland Commission called for sustainable development in “Our Common Future,” the concept of “smart growth” emerged in the U.S. For the purposes of this research, the focus is on smart growth and sustainability in developed, urban areas.

Although the terms smart growth and sustainability are sometimes used interchangeably, they are not the same thing. In the United States, smart growth is as a proxy for sustainable development. It appeals to sustainability principles by calling for development that “serves the economy, the community and the environment (U.S. Environmental Protection Agency, 2010).” However, smart growth emphasizes market-based approaches to sustainability. Historically and elsewhere, ‘sustainable development’ has used policy and governmental approaches to managing growth such as those put forth in the United Nations’ Local Agenda 21 (Krueger & Gibbs, 'Third Wave' Sustainability? Smart Growth and Regional Development in the USA, 2008).

Since the term first appeared in the media occurring in 1997 preceding the passage of Maryland’s “Smart Growth” Act its popularity has exploded both in theory and in practice (Daniels, 2001). Approximately 20 states have adopted smart growth plans and literally hundreds of communities have voted on smart growth initiatives (Gray, 2007). Smart growth appeals to policy makers trying to balance economic prosperity and environmental regulations, environmentalists and others seeking to preserve land and combat sprawl, as well as developers who benefit from economic incentives for “smart” development.

This popular support of smart growth has led to awards celebrating developments that implement its principles. The EPA Office of Sustainable Communities even has a program for smart growth research, education and technical assistance and gives out the prestigious Smart Growth Achievement Award for excellence in smart growth development (U.S. Environmental Protection Agency, 2011). In 2009, the HUD, the EPA, and U.S. Department of Transportation (DOT), formed a partnership for sustainable communities to promote smart growth principles (U.S. Environmental Protection Agency, 2010). Clearly, its appeal is still growing.

However, smart growth does not mean the same thing in all cases. It has no universally accepted definition (Gray, 2007). The principles are not applied equally; their implementation can be cherry picked for each development. The following quote from the report “Affordable Housing and Smart Growth Making the Connection” aptly describes the ideals as well as the shortcomings of smart growth policy:

The experiences of communities struggling with the challenges of development demonstrate the need to address them with the integrated problem-solving approach represented by smart growth. Because of the benefits of smart growth, many initiatives are now being labeled as such even when they address only one issue, such as open space, transportation, or affordability. These single-issue initiatives, although they may contribute to smart growth if they

are linked to a community's broader goals, do not by themselves represent a comprehensive smart growth approach. ... [C]onflicts have arisen around these single-issue "smart growth" initiatives and their negative impact on affordable housing, leading some observers to claim that smart growth and affordability are inherently in conflict. Affordable housing, however, is an explicit goal of smart growth. Policies that reduce housing affordability are not smart. With its focus on the effect of development patterns and practices on the quantity and quality of affordable housing, smart growth is a critical part of the solution (Aragoni, 2001).

As mentioned above, development can be considered smart growth even if it does not meet all the goals of smart growth. Development referred to as "sustainable" has the same problem; social equity, regional ecological integrity, and the valuation of environmental externalities are often left out of the development equation (Berke and Manta Conroy), while the easier sustainable-smart growth practices are implemented. On the whole, this does not lead to sustainable development. It may be better development, but unless it comprehensively addresses issues of sustainability, it is not sustainable.

To determine how close development has come to the sustainable development goal, this paper focuses on the extent that social equity is a part of development, using the inclusion of affordable housing as a metric as will be discussed in more detail.

Mixed-Use Development: The Epitome of Smart Growth

Smart growth principles advocate mixing land uses not only to use space more efficiently but also to reduce environmental pollution related to transportation, reduce habitat loss due to sprawl and make places more livable (U.S. Environmental Protection Agency). The Local Initiatives Support Coalition aptly describes the impetus for and the appeal of mixed-use development:

Inspired by regional demand for new housing, by the hope of creating vibrant commercial centers, and by the ethos of the "Smart Growth" movement, planners, policy makers and neighborhood residents have, with increasing frequency, been advocating for mixed-use approaches to development opportunities... At their best, mixed-use projects create vital places that use space and public infrastructure efficiently by promoting pedestrian and transit friendly environments. Often at the centerpiece of efforts to revitalize underutilized property in inner city commercial districts, mixed-use projects offer the potential to integrate the development of higher density housing with the creation of new neighborhood-scale retail space (Local Initiatives Support Coalition, 2003).

One factor that complicates whether or not a development gets credit for being an example of smart growth and thus generally thought of as sustainable is that the Smart Growth Network's "Smart Growth Principles" include creating a range of housing choices and providing housing for people of all income levels (Smart Growth Online). However, the two do not necessarily go hand in hand. Providing a range of housing types, does not mean that those

housing units will be affordable. Therefore, it does not ensure the availability of a range of affordable housing options for low-income families of various sizes and needs. It is certainly possible that communities and developers could create smart growth developments that provide a range of unaffordable housing. Furthermore, developers could create affordable housing that was not open to all low-income families. For instance, communities could encourage the development of affordable housing reserved for seniors or with small units because they do not want to increase the burden on their tax base by attracting low-income families with children. In order for development to be truly equitable and therefore fit the paradigm of sustainability it must include a range of housing types that are also affordable.

The literature suggests that indeed, social equity is still left out of the sustainable development equation. Smart growth advocates laud its ability to cure the ills associated with both with secluded public (low-income) housing and the lack of affordable housing in many areas. While EPA and HUD are working to promote affordable and equitable housing development it is unclear to what extent this has actually been achieved in recent sustainable and smart growth developments.

Historically, sustainable development has focused on attracting elites and has led to gentrification. Krueger and Gibbs note that urban sustainability is something reserved for high paid workers, such as those in the new economy (Krueger & Gibbs, *The Sustainable Development Paradox*, 2007). Smart growth policies have been shown to raise housing prices (Downs, 2005). While this may benefit homeowner's who wish to sell, it may be a detriment to low-income homeowners who wish to stay as over time their property taxes may increase. Pearsall's work has document how brownfields redevelopment, a bastion of smart growth, often leads to gentrification through increased property values and rents. Thus, the residents of the redeveloped and improved area may not enjoy its benefits in the long term (Pearsall, 2010). These marginalized populations are rendered increasingly vulnerable as people move away and the fabric of their existing social network erodes. The areas the move to, the only ones with affordable housing, may be worse areas than they had been in before.

Affordable Housing and Sustainability

Housing is generally deemed affordable if it constitutes 30 percent or less of household income (U.S. Environmental Protection Agency, 2010). Therefore any smart growth development funded in part by HUD, DOT, or the EPA should not burden low-income families when building smart growth developments in order to comply with environmental justice laws.

The EPA also recognizes that the issue of affordability is compounded by transportation options. They recognize that “for working families — those in greatest need of affordable housing — the combined cost of housing and transportation accounts for 57 percent of household income, on average (U.S. Environmental Protection Agency, 2010).” Many of the development projects we looked at that were funded or lauded by HUD or the EPA did include affordable

housing. But some of them, like the Bethesda Row development in Maryland, did not. Furthermore, private development entities are not bound by environmental justice law. They have no legal responsibility to ensure that the burdens of development are equally distributed. However, if we are to achieve true sustainable development, development must also be just.

The relationship between the need for affordable housing and poverty is complicated. Since affordability is based on a general guideline and individual incomes, whether or not housing is affordable would vary from family to family. For instance, “affordable rents” for people with very low incomes and those with moderate incomes would be different. Furthermore, the moderate income family, would could not be in poverty, but still have trouble finding affordable housing less than 30% of their total income.

Poverty on the other hand has two specific definitions: one determined by the U.S. Census Bureau and the other determined by the Department of Health and Human Services (HHS). The U.S. Census Bureau uses thresholds to measure poverty while the HHS uses poverty guidelines. Poverty guidelines are adjusted for the cost of living for each state. They used for determining eligibility for federal programs (U.S. Department of Health and Human Services, 2010). For purposes of this research, we use the definition and provided by the U.S. Census Bureau, which are design for performing statistical analysis of poverty in the United States.

Thresholds put forth by the U.S. Census Bureau do no vary geographically and are updated for inflation using the Consumer Price Index. “The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps) (U.S. Census Bureau, 2010).” Each person or family is assigned one out of 48 possible poverty thresholds, which vary according to the size of the family and the ages of the members as show in the table below (U.S. Census Bureau, 2010).

Table 1. Poverty Thresholds for 2010 by Size of Family and Number of Related Children Under 18 Years

| Size of family unit | Related children under 18 years | | | | | | | | |
|------------------------------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|---------------|
| | None | One | Two | Three | Four | Five | Six | Seven | Eight or more |
| One person (unrelated individual). | | | | | | | | | |
| Under 65 years..... | 1,369 | | | | | | | | |
| 65 years and over..... | 0,481 | | | | | | | | |
| Two people..... | | | | | | | | | |
| Householder under 65 years..... | 4,634 | 5,063 | | | | | | | |
| Householder 65 years and over..... | 3,209 | 5,006 | | | | | | | |
| Three people..... | 7,094 | 7,590 | 7,607 | | | | | | |
| Four people..... | 2,541 | 2,910 | 2,162 | 2,239 | | | | | |
| Five people..... | 7,183 | 7,579 | 6,734 | 6,080 | 5,681 | | | | |
| Six people..... | 1,266 | 1,390 | 0,743 | 0,123 | 9,201 | 8,654 | | | |
| Seven people..... | 5,975 | 6,199 | 5,425 | 4,885 | 3,880 | 2,707 | 1,420 | | |
| Eight people..... | 0,235 | 0,590 | 9,860 | 9,219 | 8,311 | 7,158 | 5,958 | 5,653 | |
| Nine people or more.... | 8,400 | 8,635 | 7,988 | 7,445 | 6,553 | 5,326 | 4,217 | 3,942 | 42,249 |

In order for a family to be in poverty, the family's income threshold must be less than one. If it is less than one, every member of that family is considered to be in poverty. Here's an example from the U.S. Census Bureau:

Family A has five members: two children, their mother, father, and great-aunt. Their threshold was \$26,245 in 2009... Suppose the members' incomes in 2009 were:

| | |
|----------------------------|-----------------|
| Mother | \$10,000 |
| Father | 7,000 |
| Great-aunt | 10,000 |
| First Child | 0 |
| Second Child | 0 |
| Total Family Income | \$27,000 |

Compare total family income with their family's threshold: $\text{Income} / \text{Threshold} = \$27,000 / \$26,245 = 1.03 \dots$ Since their income was greater than their threshold, Family A is not "in poverty" according to the official definition (U.S. Census Bureau, 2010).

The government recognizes that these thresholds do not fully reflect every individual family's needs (U.S. Census Bureau, 2010). In order to put this in perspective, we did a simple analysis of how this family would fare in the state of Maryland, where smart growth first took hold. The lowest fair market rent (FMR) for a two bedroom apartment of all the counties in Maryland was \$588 in 2010 (National Low Income Housing Coalition). This means that the family would be paying \$7056 per year (about 26% of their income) to rent a two bedroom apartment, which is likely too small to meet their needs. This living arrangement would even meet the EPA's definition of affordable housing because less than 30% of the family's total income would be spent on housing.

However, if this family wanted to live in the greater Baltimore or D.C. areas, their rents would likely exceed \$1,000 per month for a two bedroom apartment, let alone a three bedroom one (National Low Income Housing Coalition). If they lived in two-bedroom housing at the fair market rent, it would push their expenses on housing to be more than 44% of their total income. By the EPA's and HUD's standards, this is not affordable. Where will these people live while they are on the waiting list for subsidized housing if no affordable housing is built? How much further will they have to travel to work if they cannot afford to live in the area?

The hodgepodge application of smart growth principles does not ensure that economically disadvantaged people will be economically protected. We are concerned that the application of these principles could lead to a disproportionate burden of development being placed on low-income populations. Analysis from the year 2000 showed that explicit inclusion of the sustainable development concept in plans and policies did not affect how well they actually promoted sustainability (Berke and Manta Conroy). Krueger and Gateman's research confirmed this finding (Krueger and Agyeman, Sustainability schizophrenia or "actually existing sustainabilities?" toward a broader understanding of the politics and promise of local sustainability in the US). Furthermore, smart growth emphasizes the use of market approaches for development (Krueger & Gibbs, 'Third Wave' Sustainability? Smart Growth and Regional Development in the USA, 2008). Historically, affordable housing has been developed through policy incentives, such as awarding a density bonus to developers if some of the housing is affordable. We wanted to determine whether or not sustainable-smart growth development tended to include affordable housing or not, given its market approach.

Accepting the conclusions that equity is often left out of the development equation and that smart growth uses market-based incentives and policies to encourage development, our research investigated spatial development plans that used the *rhetoric of sustainability*. In order to measure the gap between actually existing sustainabilities and the ideal of sustainable development we focused on three questions: Is this a "sustainable" or "smart growth"

development? What is the socioeconomic composition of the existing community for which the development is planned? And, who is the intended market for new developments (e.g. is non-discriminatory affordable housing included)?

Sustainability and Gentrification

At any given time, there is a balance at play in the forces that shape development all centered on the question, “Development for whom?” Is the development for the benefit of the existing residents? What about people who would like to live there? Don’t their needs and desires matter as well? Who has the right to profit from the land? The developers? The government? The current and future residents? All of the above? Is land development simply a robbery by the capitalist class, the elites, of the poor and working class (Krueger & Gibbs, *The Sustainable Development Paradox*, 2007) and (Freeman, 2006, p. 60)? The question of whom development is for can be summed up in one long, messy word: gentrification.

Gentrification: The Good, the Bad and the Ugly

What is gentrification? According to some it means improved neighborhoods; neighborhoods that are safe, livable, and contribute to the local tax base (Lees, Slater, & Wylie, 2008). This too recalls the rhetoric of sustainability—making communities that care for the environment and society while improving the economy. But at what price? To many, gentrification means the displacement of low-income persons perhaps to worse places that are the only option they can afford. Bruce Dixon goes as far as to say that gentrification is “a theft of public and private resources from...poorer neighborhoods which deserve to be improved for the people who already [sic] live there, (Dixon, 1998).”

This process is described in the report “A Civic Vision for Turnpike Air Rights in Boston,” which discusses Boston’s growth and redevelopment:

“The diverse and historic communities that line the Turnpike together house more than a quarter of Boston’s population and represent many of the city’s most historic and vital neighborhoods. Perhaps more than any others, these neighborhoods have endured the costs and enjoyed the benefits of changes that have occurred over the past two decades. The costs are visible—congested streets; housing shortages (the 1999 residential vacancy rates were under 1%); and displacement of long-time residents in the face of surging housing costs. The benefits are just as striking—dramatic improvements in unemployment rate and income levels (instead of lagging, Boston now far exceeds national norms); and vibrant main streets (empty storefronts have largely disappeared) (Strategic Development Study Committee, 2000).”

In *There Goes the ‘Hood*, Lance Freeman acknowledges that gentrification can have its benefits. In his interviews with low-income people in Harlem, NY, he found that they appreciated the increased safety of the neighborhood and greater access to amenities (Freeman, 2006, pp. 60-62). He also notes the duality in the response to the increase in property values. On

the one hand owners with an eye towards moving welcomed the increased values because it meant they could sell and pocket the change (Freeman, 2006, p. 61). On the other hand, the increase in property values prevented residents who had grown up in the area from moving back to start their own families. He also notes that rapidly rising property taxes could pose a threat to owners who wish to stay (Freeman, 2006, pp. 76-78).

In one of the developments we discovered in the course of this research, the violence of gentrification was clear. A mobile home park with lots of elderly residents was cleared to make way for upscale housing that eventually fell through when the housing bubble burst, but not soon enough to keep the residents in their homes (Lindberg, Bay Pines Mobile Home Park Parcel for Sale Again, 2009). In this case the perpetrator of this economic brutality was not a sustainable or smart growth development, rather a typical developer hoping to make a profit on this waterfront property. However, the next developer to take interest in the site, Kittson, has a history of building “sustainable” mixed-use communities similar to the development that have proposed for the now vacant Bay Pines area (Burney, Kitson Buys Rare Vacant Florida Land, 2010). We were able to capture the destruction of the Bay Pines Mobile Home Park community using Google Earth’s “Historical Imagery” feature.

The photo below shows the Bay Pines Mobile Home Park surrounded by typical suburban development. In the park there are ponds, trees, and five hundred mobile units that hundreds of mostly elderly people call home.



Figure 2. Bay Pines Mobile Home Park, Seminole, FL, January 7, 2006. Photo courtesy of Google Earth.

Since its opening in 1984, the Bay Pines Mobile Home Park had grown into “a vibrant community, its 500 oak-shaded dwellings owned by mostly elderly residents who thought they'd found an Eden where they could live out the remainder of their lives (Lindberg, Bay Pines Mobile Home Park Parcel for Sale Again, 2009) and (Lindberg, Mobile home park purchase back on, 2007).” This 52 acre park was near the ocean, transit, and a hospital. Plus, it was in Florida. It is no wonder that people loved it.

The park was originally supposed to remain open until 2020. But a deal was made, the property was controversially sold, and the residents were evicted (Lindberg, Bay Pines residents sue over sale of mobile park, 2006). What happened to the residents? Anne Lindberg of the St Petersburg Times writes, “The lucky ones found other mobile homes. Others moved into rental housing. Some died (Lindberg, Bay Pines Mobile Home Park Parcel for Sale Again, 2009).”

Lindberg also discusses some of the market forces behind the development of this land:

As Pinellas property values began rising at the beginning of this century, mobile home parks became an easy target. Many were owned by families and populated by folks — many poor and elderly — who owned the mobile homes, but not the land underneath them. The property owner made money from rents the mobile home owners paid on the land. Some property owners could not resist the lure of multimillion-dollar offers and sold the land. And, while elected officials expressed sympathy, it was hard to turn down the prospect of increased

tax revenue from newly redeveloped land (Lindberg, Bay Pines Mobile Home Park Parcel for Sale Again, 2009).

While in this case the housing bubble was to blame for the increase in property values, it could just as easily have been the result of smart growth policies that make redevelopment of “underutilized” spaces in urban areas more attractive and thus drive an increase in property values (Downs, 2005).

In this the case of Bay Pines mobile homeowners there were few affordable options available to them. Florida state law did not provide them with enough money to move their trailer, especially if the trailer was not up to code. Furthermore, the residents had limited options for relocating with their mobile home; other mobile home parks had also been cleared to make way for new-more profitable development (Lindberg, Bay Pines Mobile Home Park Parcel for Sale Again, 2009). Ideally, smart growth policies and developments would do better. They can do better. In order to fit the true paradigm of sustainability, they should ensure that affordable housing is available to all members of society.



Figure 3. Bay Pines Mobile Home Park empty, Seminole, FL, April 4, 2010. Photo courtesy of Google Earth.

From the photograph you can see the faint white markings where trailers once stood. The original development plan would likely have used many more resources and preserved much less green space than the mobile home park did. It is unclear whether the new, smart growth development slated for this property would be better environmentally than the mobile home park

was.

Some of the smart growth developments we found tried to remedy this by providing affordable housing in the new development. However, not all methods of preserving affordable housing are equal. Some provided affordable housing for people with moderate incomes and not low-incomes. Some promised the housing would be affordable for 10 years or so, but after that it would be converted to market rate housing. Still others limited who the housing was for in order to meet the needs of certain populations, while inadvertently making it seem like there is more affordable housing than there actually is for the general public. With the loss of Bay Pines, some government officials were concerned about the disappearance of affordable housing and offered to let developers have higher densities if some of the housing was affordable. Unfortunately, the increased density cannot always make up for the magnitude of the loss. Lindberg writes that:

At the Bay Pines property, that would mean the developer would have gotten an extra 240 units overall if he promised that 40 would be classified as affordable. In other words, the county traded higher density to get 40 affordable homes where there had been 500 affordable homes. Most of the people who had lived in the 500 mobile homes were too poor to afford to buy or rent one of the 40 new affordable units (Lindberg, Bay Pines Mobile Home Park Parcel for Sale Again, 2009).

Smart growth developments are not immune to such disparities. Depending on the state and municipality, developers can pay a fee in lieu of building affordable housing. In other cases like Bay Pines, the “affordable” housing provided is neither affordable enough for people with very low incomes nor is it provided in sufficient amounts to meet the need.

Taking a step back from the economic injustice and monetary losses of displacement, it becomes clear that there are social costs as well. People of lower incomes depend on informal networks of friends and family. (This is not to say that people of higher incomes do not rely on them as well, but in theory they can afford to pay to have more of their needs met (childcare, time-off from work, exercise) than low-income families can.) Because they rely on each other, they may develop a sense of community. When an entire community is displaced to make way for new development, how likely is it that they will remain together, given the general lack of affordable housing available? Indeed, when a community is displaced and the residents scattered in all directions, the community is broken. This too is a great loss. Bay Pines residents may be lucky. They did not lose their community entirely; they hold a picnic once a year at the Veterans Park across from their old home (Lindberg, Bay Pines Mobile Home Park Parcel for Sale Again, 2009). Other communities may never meet again.

In order for development to be sustainable it must be equitable. The benefits must be available to current residents, their children, and their grandchildren. One of Freeman’s key findings was that people in subsidized or rent-stabilized housing were not likely to be at risk of displacement due to gentrification (Freeman, 2006, p. 76). However, federal and state aid

assistance programs are not enough. There is a shortage of affordable housing and the waiting times to get federal funded affordable housing (section 8) can take up to ten years (U.S. Department of Housing and Urban Development, March 1999).

In 1995 HUD documented the availability of housing at or below the FMR. “In the 10 metropolitan areas considered...at least 40 percent of all two-bedroom units had rents at or below the FMR. These units were widely disbursed, accounting for at least 30 percent of the rental stock in over two-thirds of residential tracts. Thus, affordable housing is available, but without assistance families with worst case needs for housing simply cannot afford it. It is this problem of affordability, caused by lagging incomes and high housing costs, that faces the overwhelming majority of families in need of housing assistance (U.S. Department of Housing and Urban Development, 1995).” Section 8 housing vouchers are supposed to remedy this situation. But they have not been able to meet the demand.

There is a national average time on the waiting list of 11 months for public housing and 28 months for Section 8 vouchers, but in large cities the wait is much, much longer. In New York City a family must wait 8 years for public housing and, in Washington, D.C. or Cleveland, 5 years. In New York City or Washington, the wait for Section 8 is 8 years; in Los Angeles it is 10 years. The combined waiting lists in Chicago alone could consume all 60,000 vouchers appropriated in FY2000 (U.S. Department of Housing and Urban Development, March 1999). Multi-year waiting lists discourage families from applying, and this results in an underestimation of the number of interested applicants (U.S. Department of Housing and Urban Development, 2000).

Who are the people at need the most help? The majority of them are families with children. In fact, “Over 2 million families with children have worst case needs for housing. While as many as 44 percent receive Temporary Assistance to Needy Families or Supplemental Security Income (SSI), one-half have earnings as their main source of income; yet 84 percent have incomes below the poverty line (U.S. Department of Housing and Urban Development, 2000)” The second largest group in need of affordable housing is the elderly. “Almost 1.2 million households with worst case needs consist of single elderly individuals or elderly couples with no children present in the household. Elderly households overwhelmingly receive Social Security, yet more than one-half of them have incomes below the poverty line, and 74 percent have incomes below 30 percent of area median.

For there to be adequate affordable housing, it must actually be built. And in order to ensure a just distribution of benefits from the development and of governmental services (schools etc.), the poor cannot be segregated. HUD has recognized this; in the redevelopment of many public housing projects its policy has been to put in mixed-income housing and give affordable housing vouchers to residents who were displaced (Lees, Slater, & Wyly, 2008, pp. 204-206). While this may overall lead to a more sustainable community through distributive justice, it does not guarantee that adequate affordable housing will be maintained within the city,

nor does it guarantee that members of society share equal costs of development.

If class mixing is considered more sustainable, not only due to a more supported tax base but also because of increased distributional justice and social equity, is sustainability not, therefore, a force of gentrification? Lees, Slater and Wyly point out that:

“Creating social mix...invariable involves the movement of the middle class into working-class areas, not vice versa, working on the assumption that a socially mixed community will be a socially ‘balance’ one, characterized by positive interaction between the classes. ...Gentrification disguised as ‘social mix’ serves as an excellent example of how the rhetoric and reality of gentrification have been replaced by a different discursive, theoretical, and policy language that consistently deflects criticism and resistance (pp. 207).”

Sustainability and smart growth play a large role in current development policy and debate. But who would criticize the goal of achieving sustainable development? Indeed, most agree that sustainable development is idea. The disagreement is about how it is implemented; it is about who wins and who loses and why. It is possible to have social mixing without displacing low-income families. Despite its benefits, gentrification can unfairly impact low-income people. If sustainable development is to embody its ideals, it must not become a ruse for gentrification. It is imperative that sustainable development include long-term measures for preserving affordable housing. However, this paper is not focused on various methods for maintaining affordable housing. Rather, this work focuses on determining the extent of sustainable development’s contribution to gentrification.

To do this we researched the extent that affordability, and thus social equity, is a part of sustainable development in America today. More specifically, we identified and located sustainable developments, determined whether or not affordable housing was included, and then analyzed them on the national level to see if any trends emerged. To get a deeper sense of what was happening at the neighborhood level, we did several case studies of cities to determine whether or not there was a consistent pattern based on where the new developments were located and the income status local population. By examining the national and local levels we are able to obtain a wide and deep understanding of the state of affordability in sustainable development to date.

Hypothesis

Sustainable, smart growth development has not succeeded in fully integrating social equity into it implementation, using nondiscriminatory affordable housing as an indicator.

Methodology

We examined US forms of sustainability from the perspective of *where* the developments are located. After identifying the location using information given in their descriptions and determining an address for them on Google maps, we investigated the economic demographics of the affected community and the policies surrounding the development. We then mapped these developments and examined in order to draw conclusions about the potential effects of sustainable development today on existing communities.

Selection Criteria

Since the definition of what constitutes smart growth is so broad, we limited the scope of the project to developments that were described as smart growth or sustainable developments by newspapers, smart growth groups, or their developers. If the developers included the terms smart growth or sustainability in the goals the developments were considered to be smart growth/sustainable developments. Although New Urbanism also appeals to the principles of sustainability, developments that only included the terms “new urbanism” or “new urbanist” were not included. As noted by a Google search, “smart growth” is more popular than “new urbanism” as evidenced by the 1,070,000 hits versus 397,000 hits, respectively (Google Search).

Furthermore, we limited our selections to mixed used developments (the epitome of smart growth) that included a housing component, which allowed us to assess whether or not affordable housing was included. Affordable housing that discriminated on the basis of age or disability, e.g. senior housing and disability housing, while important, does not capture whether or not affordable housing is generally available in the area and therefore was recorded as affordable.

Mapping

We used data from the 2000 Summary Files 1 and 2 from the U.S. Census Bureau for the income levels in each tract. Shape files of the states and tracts were obtained from the U.S. Census Bureau as well as from ESRI. We used census tracts as the smallest mapping unit because each tract represents a roughly homogeneous population of 2,500 to 8,000 people and has relatively consistent boundaries from decade to decade. It is also the smallest census unit for which data is not tabulated based on estimates (U.S. Census Bureau, 2000).

In the preliminary trial of this research, we examined the median income of these areas to see whether or not poor and moderate income families might feel economic pressure from this development. Depending on the distribution of incomes in a tract, it is possible poverty line could be higher than the median income.

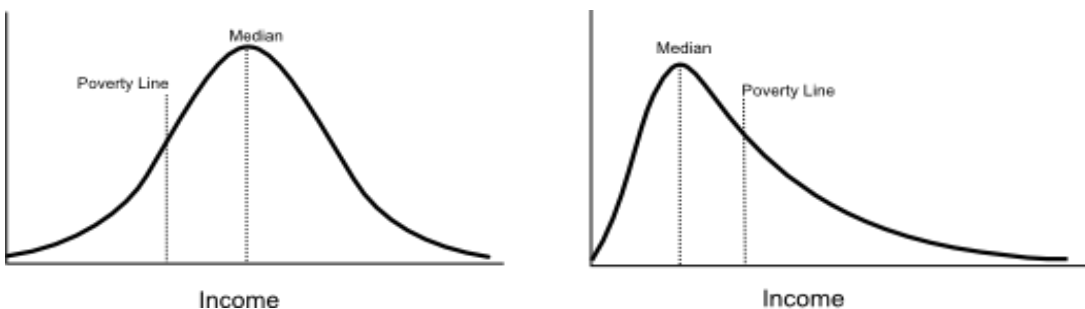


Figure 4. Income Distributions

In the Figure 4. the income distribution is relatively normal and the poverty line is below the median income. Even with this distribution shape, if everyone in the community were very poor it is possible that the poverty line would still be above the median income if the wealthiest households were, in reality, very poor. But perhaps more likely it is that a poor community's income distribution would look similar to the figure on the right, in which case an analysis looking at affordable housing would miss the needs of the population below the poverty line as well as above the median income.

Search Methods

1. Searched the following websites for developments: Smart Growth America, Smart Growth Online, Urban Land Institute, Congress for new Urbanism, Environmental Protection Agency Smart Growth and Sustainability pages. Made sure to examine the EPA Smart Growth Achievement winners, CNU Charter Award winners, and the Phoenix Award winners.
2. Examined all cities in the United States with populations over 250,000 (U.S. Census 2000) to determine whether or not the city had a sustainability or smart growth plan using the following Google search function: "name of city" AND ("smart growth" OR "sustainable" OR "sustainability"). Searched hits following links (and searched more terms if necessary) related to "master plan" development plan, revitalization, infill, smart growth, redevelopment, improvement district, brownfields, etc.
3. Cities that had a plan using the terms "smart growth," "sustainability," or "sustainable" were further examined by identifying development and master plans mentioned on the websites.
4. If the plans or development descriptions fit the Decision Tree for Development Inclusion (see below) they were included in the database and analyzed.
5. The smart growth or sustainability term inclusion for a member of a development's project team (i.e. owner, developer, architect, general contractor) was determined by finding that member's website and using the following Google search function: site:web-

address (“smart growth” OR “sustainable” OR “sustainability”). This search function returns all instances of those words used on any page within the website.

6. Affordability was similarly determined. Websites that included developments or plans were often searched using this Google search function: site:web-address (“affordable” OR “affordability” OR “workforce”). The results were then examined to determine whether or not the plan or development met the Affordability Determination Criteria.
7. Searched lists of Award Winning developments and selected developments that included the rhetoric of smart growth and fit the selection criteria.
8. Developments created by small (i.e. those that build several houses in a neighborhood over the course of decades) community development corporations were not searched for and were generally not included.

Decision Tree for Development Inclusion

1. Was the development built or planned to be built in the timer period between 1990 and 2010?
 - a. Yes–Next
 - b. No–DON’T INCLUDE
2. Is the development solely an infrastructural change? (e.g. road improvements, new transportation)
 - a. Yes–DON’T INCLUDE
 - b. No–Next
3. Is it mixed use development with a housing component?
 - a. Yes–Next
 - b. NO–DON’T INCLUDE
4. Is the housing component restricted by age, disability or previous housing status, e.g. senior/disability/formerly homeless housing?
 - a. Yes–Next
 - b. No–DON’T INCLUDE
5. Is the site adjacent to or in a neighborhood, or is the plan for a specific neighborhood area?
 - a. Yes–Next
 - b. No–DON’T INCLUDE
6. Does the plan explicitly use the term “smart growth” or “sustainability”?
 - a. Yes–Include
 - b. No–Next
7. Do any of the developers, architects, or general contractors of the project use the terms “smart growth” or “sustainability” to describe their company’s mission or work?
 - a. Yes–Include
 - b. No–Next
8. Has the development received an award for sustainability or smart growth (or an award

mentioning sustainability as a goal such as the Phoenix Awards for brownfield redevelopment)?

- a. Yes—Include
- b. No—DON'T INCLUDE

Results

The map below depicts the four hundred and ninety two developments that met the search criteria. They are spread throughout the United States. Thirty seven percent of them included affordable housing.

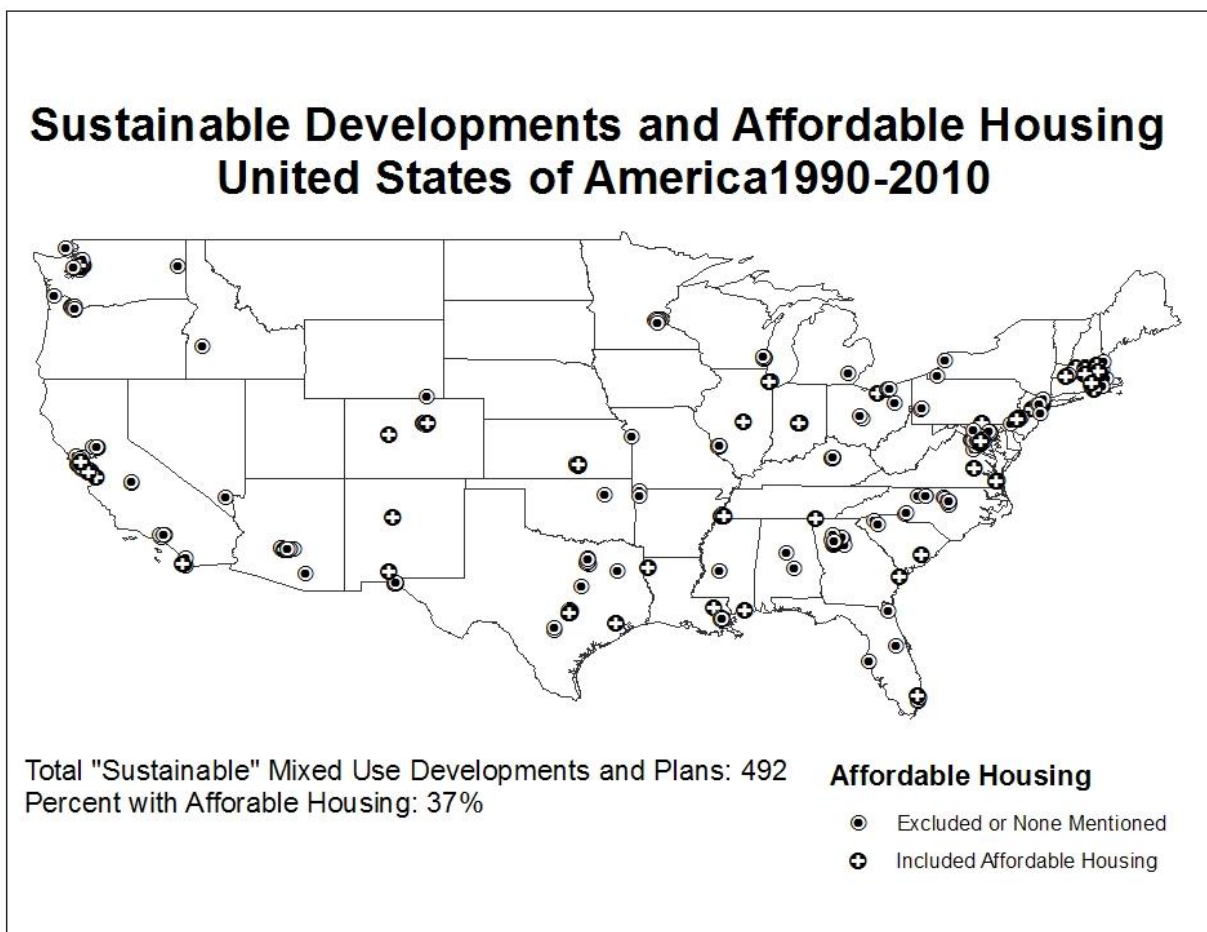


Figure 5. Map of Sustainable Developments 1990-2010

The lack of developments in the areas of the northern Midwest and of the northern Northeast should not be considered to not have any sustainable developments. Rather, developments that may have occurred there did not show up in our selection results possibly because there were few large population centers.

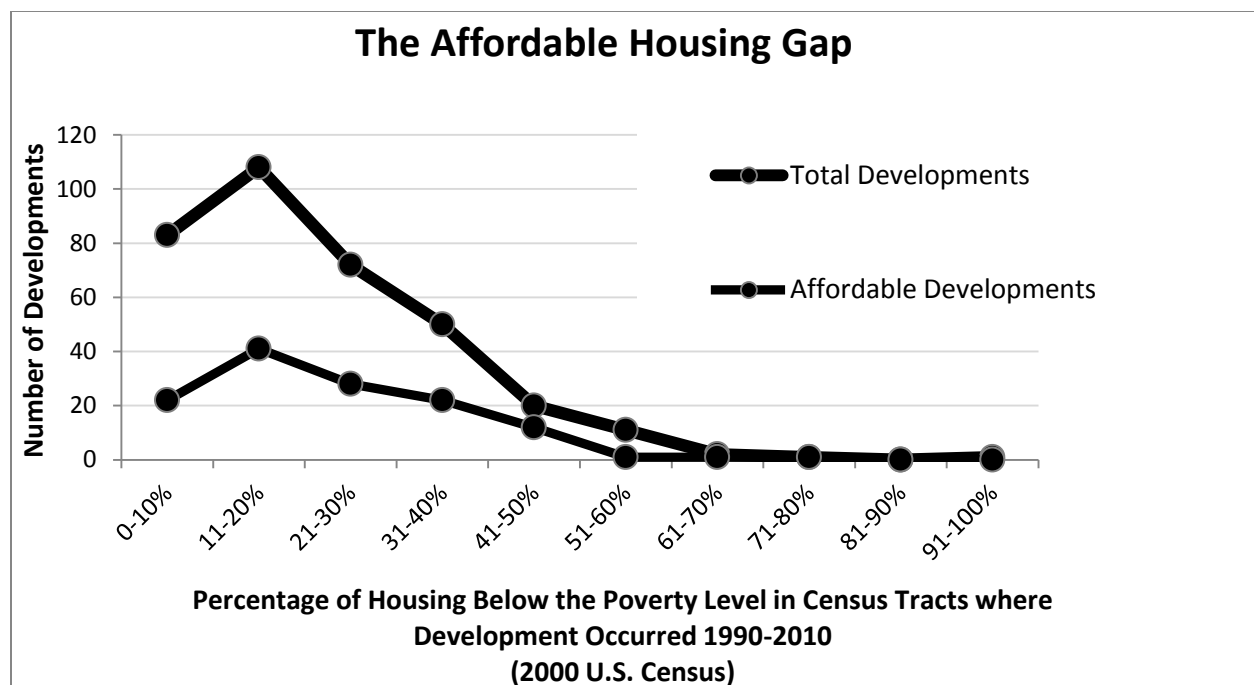


Figure 6. The Affordable Housing Gap

This graph shows the number of developments that occurred in tracts with various levels of occupied housing units under the poverty level. Most developments occurred in tracts that had between eleven and twenty percent of the occupied housing in poverty. It is interesting to note the steady decline in developments in tracts that had over twenty percent of the occupied housing in poverty. Tracts that had more than sixty percent of the occupied housing units in poverty experienced very little development. However it is unclear whether or not developments in that percentage range decrease because they are not being developed, there are very few such areas, or because the developments that are being implemented are not mixed use.

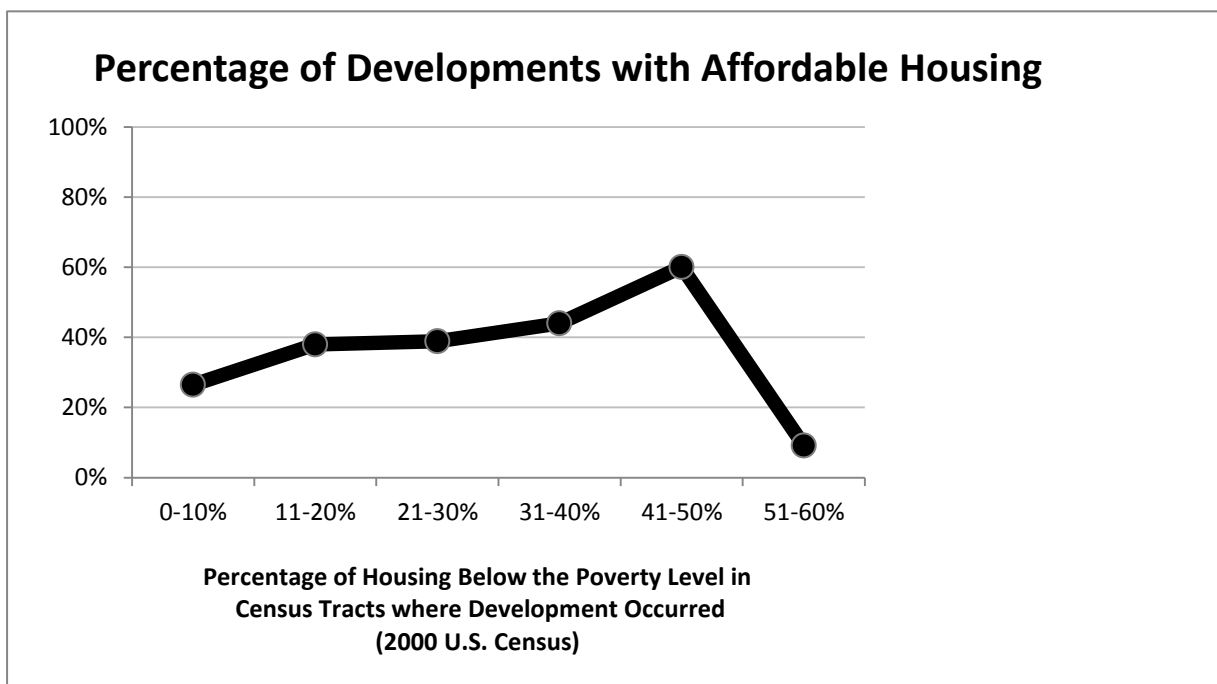


Figure 7. Percentage of Developments with Affordable Housing

Most importantly, this graph provides insight on the social equity of sustainable development as it is practiced today. If developments fit the paradigm of sustainability that is they included affordable housing we would expect the lines to overlap completely. The gap between the solid line and the dashed line represents what sustainable development has yet to achieve: equitable housing development.

The graph above depicts the percentage of developments with affordable housing with respect to the percentage of housing below the poverty level in tracts where developments occurred. It shows that nearly thirty percent of developments that went into tracts with relatively little housing in poverty included affordable housing. While it is not one hundred percent, perhaps thirty percent is not too bad when it comes to protecting the people in the housing units that make up less than ten percent of the total occupied housing stock. The general trend upward to a higher percentage of affordable housing is encouraging. However, the sharp drop in the percentage of developments with affordable housing in the when fifty to sixty percent of the housing units have families in poverty is puzzling. There are several explanations for the drop. It could be due to the small sample size within this range (11 developments). In the worst case scenario, it could be due to the development of the urban frontier (the areas on the fringe of the worst areas in a city) with “sustainable,” luxury housing.

In terms of whether or not the market-based of smart growth is working for affordable housing development, we found that in general it was not. Many of the developments that included affordable housing did so because a growth policy, not because of a market incentive.

Most of the developments in San Francisco, CA and Massachusetts included affordable housing because a certain percentage of affordable housing was required for any new city or state funded development. A sizeable portion of the rest of the developments were funded in part by HUD or the EPA who usually included affordable housing in their developments, but not necessarily in the ones that they praised (see Bethesda Row.)

Case Studies

Smart Growth in Maryland

Since Maryland was the first state to pass legislation that specifically related to “smart growth” in 1997, one could speculate that they should be the furthest along in implementing that policy. However, it is also possible that other regions learned from Maryland’s mistakes in smart growth implementation and have achieved better results. Either way, we thought it was appropriate to see what the data shows on smart growth in Maryland.

Bethesda Row: The Best Block in America?



Figure 8. Bethesda Row (Google Earth, 2010)

| SMART GROWTH PRINCIPLES BETHESDA ROW | |
|---|---|
| #1 Mix Land Uses | ✓ |
| #2 Compact Building Design | ✓ |
| #3 Range of Housing Choices | - |
| #4 Walkable Neighborhoods | ★ |
| #5 Distinctive and Attractive Places | ✓ |
| #6 Preserve Open Spaces and Farmland | - |
| #7 Development in Existing Communities | ✓ |
| #8 Transportation Choices | ✓ |
| #9 Predictable and Fair Decision Making | ✓ |
| #10 Community and Stakeholder Participation | - |

| KEY | |
|-----|-------------------------------------|
| ★ | Principle highlighted by case study |
| ✓ | Other principles illustrated |

Bethesda Row has been recognized by the EPA, the Washington Smart Growth Alliance, and the Congress for New Urbanism as an excellent example of smart growth (U.S. Environmental Protection Agency). The checklist on the right gives an overview of all the smart growth principles illustrated in the project. Notice, the definition of what constitutes smart growth is loose; a development only has to show a few of the principles to be considered smart

growth. Tellingly, this development does not include a range of housing choices. Here's what it does include:

Bethesda Row, located near the edge of downtown Bethesda, Maryland, illustrates the revitalization of a suburban commercial district into a mixed-use, walkable downtown. The project is so successful that it draws customers not just from surrounding neighborhoods, but also from around the greater Washington metropolitan area.

The development... creates a thriving, pedestrian-friendly streetscape. Both the sidewalk design and parking solutions are key to making the project a walkable neighborhood. Brick sidewalks, trees, fountains, plazas, and outdoor seating all encourage residents and visitors to walk around the mix of local, regional, and national retailers and restaurants....The project is being built in seven phases on parts of four city blocks. When complete, it will contain 360,000 square feet of retail and restaurant space, 140,000 square feet of office space, and 100,000 square feet of residential space. Phase Four was completed in 2002, and the subsequent phases include a new supermarket and all the residential space. The development's location along the Capital Crescent This fountain and plaza located at the entrance of a bookstore act as a central meeting and gathering place in Bethesda Row (Environmental Protection Agency, 2010).

Further research on our part revealed that the housing component of Bethesda Row consisted of 180 luxury apartments (Upstairs at Bethesda) and (Maryland RealEstateRama, 2009). The website for apartment listings at Bethesda Row (pictured below) is certainly appealing to a wealthy clientele.

Figure 9. Bethesda Row Apartment Website (Upstairs at Bethesda Row)

There is no affordable housing at Bethesda Row. How far will the people who clean the buildings, check-out customers, and wipe down tables have to come from? Will they be able to

afford housing in an area near Bethesda Row? If these low-wage earners have to travel far to get here how is that better for the environment? How is that smart? Furthermore, if they have to travel further to get to work than they would if there were affordable housing available, that means they will also have higher transportation costs? How is it fair that those who earn the least have to pay more in travel costs because they cannot afford to live where they work?

To answer some of these questions we looked into the demographics of the area.

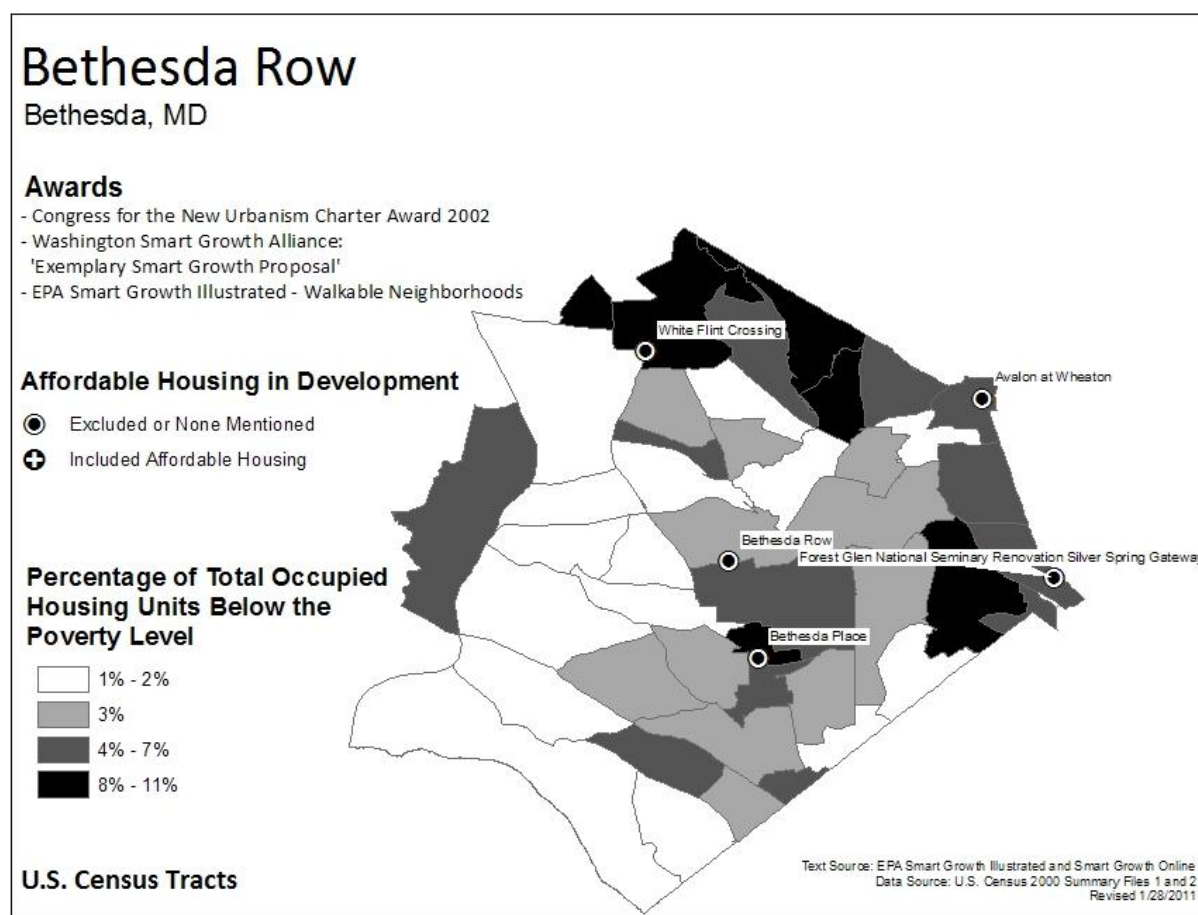


Figure 10. Housing Below the Poverty Level in Bethesda, MD

This first map shows the percentage of total occupied housing units with household incomes below the poverty level. First, it is important to recognize that all of the tracts surrounding the Bethesda Row development have fewer than 11% of housing units with households living under the poverty level. The implications of this distribution are twofold: one, there is little poverty in this area, and two, since there is little poverty in this area there may be very limited options for low-income people to obtain housing because they are likely to be priced out of the market. None of the mixed use, “sustainable” developments we catalogued in this region had affordable housing, as indicated by the map. Just how many households are at risk?

The next map shows the number of occupied housing units that are below the poverty level.

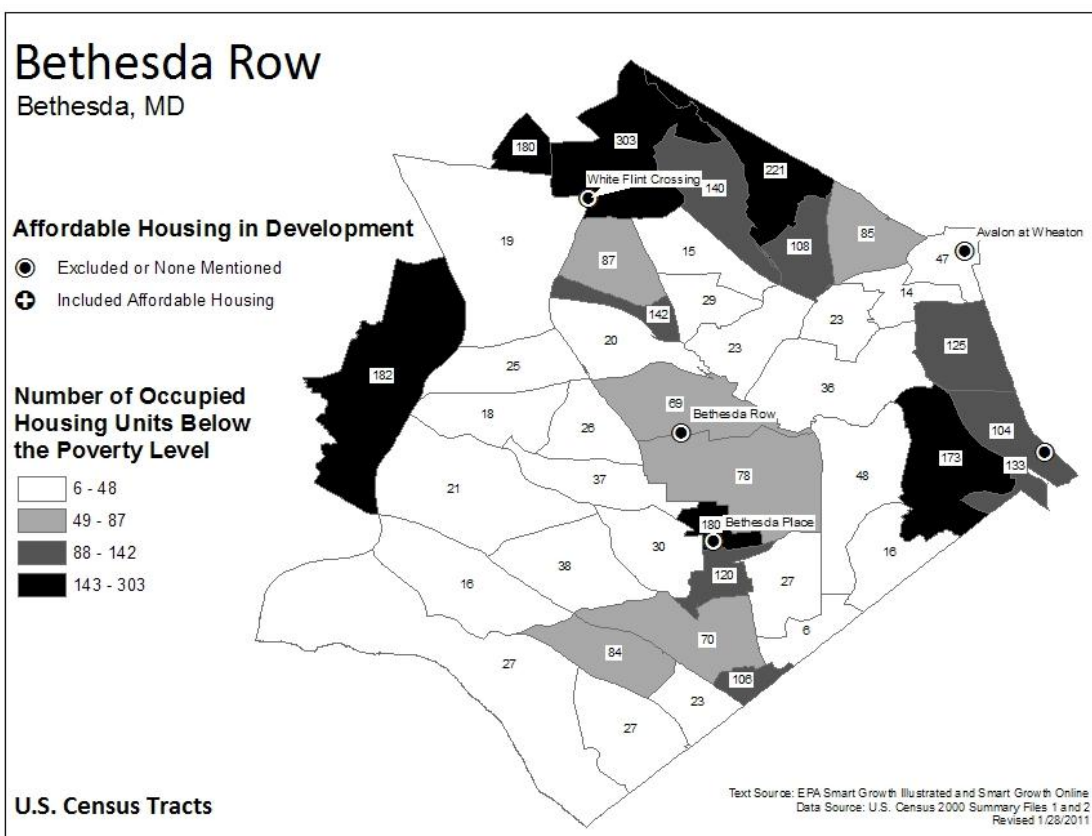


Figure 11. Households with Potential Risk for Displacement, Bethesda, MD

Notice the areas in white do have some households who live below the poverty level. These people may be elderly and on a fixed income of social security. Or, if the housing statistics mentioned previously apply, it is likely that many of the households are families with children.

What this map does not show is the difference between low-income rental households and owned households. This distinction is important because families that rent are at greater risk for being displaced, whereas the displacement of homeowners by the market is more likely to be gradual through increased taxes or lengthy and often contentious buy-out processes. To get a sense of the risk that renters face, the next map shows the percentage of renter occupied housing units below the poverty level.

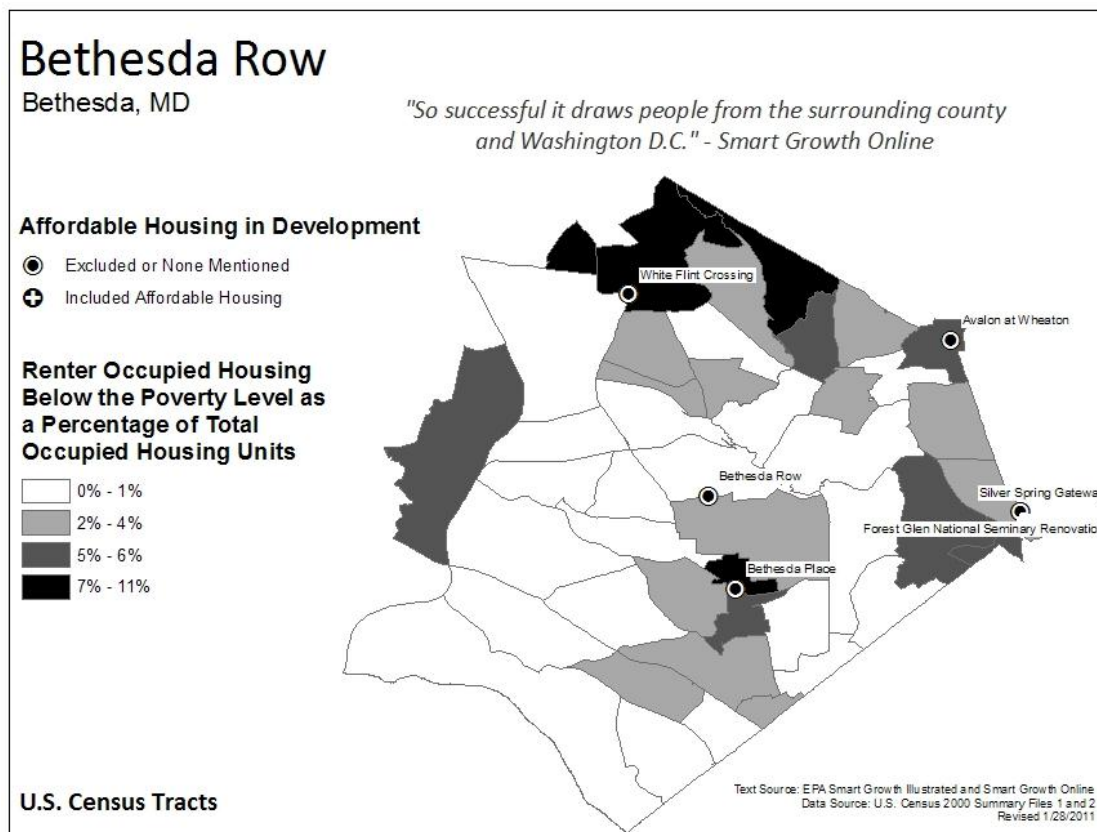


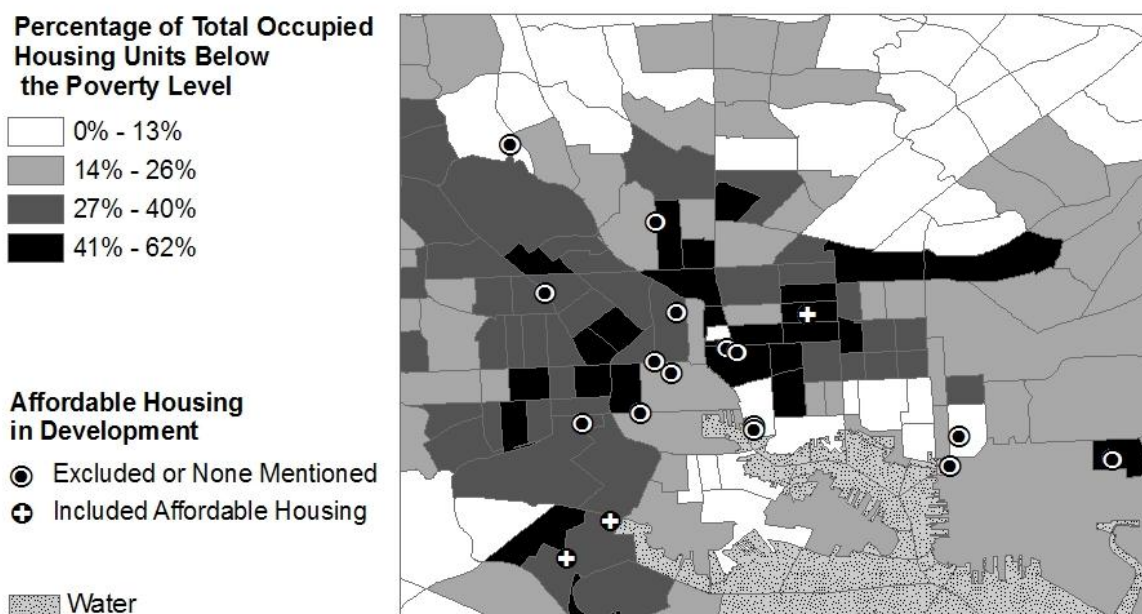
Figure 12. Renters Below the Poverty Level, Bethesda, MD

If the Bethesda Row development is so successful that draws people from the surrounding community and Washington, D.C. should not this area also become a more attractive place to live? The areas to the north as well as directly to the south have small populations with incomes below the poverty level living in rental housing. This rental housing is not necessarily affordable for these families, but somehow they manage to remain. Are they reaping the benefits of the sustainable mixed-use developments? Maybe they are somewhat; perhaps they have greater access to amenities and benefit from living in relatively wealthy areas with good schools. But unless, they have guaranteed affordable housing, they are at risk and therefore they may not be beneficiaries of this development in the long run. Sustainable development for whom? For those that can afford it.

Baltimore, MD

Baltimore, a city that was once infamous for crime, is now famous for its redevelopment. But when it comes to equitable, sustainable development, the maps we developed are not encouraging. Of the 18 sustainable-smart growth developments we identified in the Baltimore area, only three of them included affordable housing.

Baltimore, MD



U.S. Census Tracts

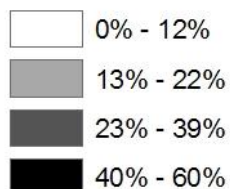
Data Source: U.S. Census 2000 Summary Files 1 and 2

The percentage of poor households in Baltimore is much, much higher than in Bethesda. The map above shows the percentage of total occupied housing units that are below the poverty level in the year 2000. The poorest areas, those where approximately half of the households live below the poverty level, are not on the edges of the city where the suburbs start, nor are they around the harbor where the city has invested in redeveloping the water front. The poorest areas are in the middle of the city, forming a semi-iris around the harbor. These areas were disinvested as people moved to the suburbs. Now, the people who remained and bore the brunt of that disinvestment are at risk of being pushed out —removed once again from the benefits of development.

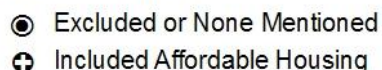
The lack of affordable housing in the sustainable-smart growth developments we identified in the Baltimore area is disheartening. Sustainable development, once again, appears to be trying to attract an elite clientele. Smart growth advocates say it is time to return to the city. That baby boomers, empty nesters, and young professionals, those seeking smaller (non-family) sized apartments, want to live in urban areas for their excitement and easy access to amenities. They are likely to be attracted by sustainable, mixed-use developments. And thus the story of gentrification and displacement begins again.

Baltimore, MD

Renter Occupied Housing Below the Poverty Level as a Percentage of Total Occupied Housing Units



Affordable Housing in Development



 Water



U.S. Census Tracts

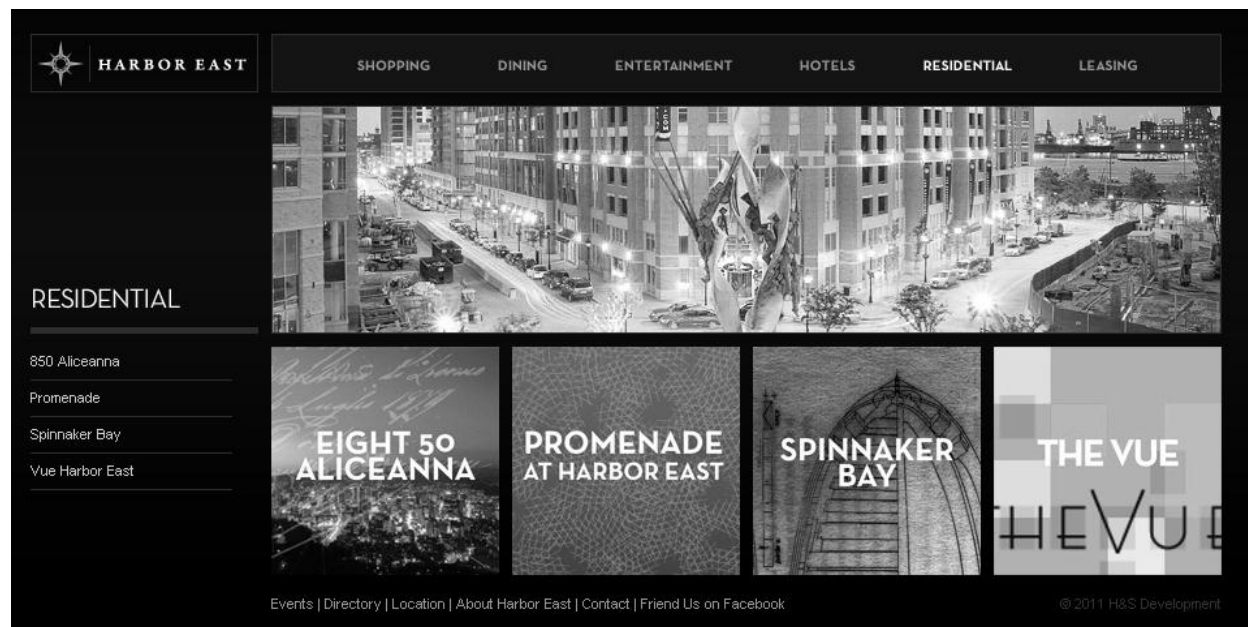
Data Source: U.S. Census 2000 Summary Files 1 and 2

Figure 13. Percentage of Households at Risk for Displacement

The map above shows the percentage of households that are below the poverty level that also rent. These households are at the greatest risk for displacement. From viewing the map, it does not seem that developments are targeting the poorest areas. If they were, the developments (dots) should all be located in dark grey or black areas. Instead, many of them are not, or at the very least, they are on the fringe. This may be related to what Neil Smith postulated in his book, *The New Urban Frontier: Gentrification and the Revanchist City*.¹ He states that, “As an economic line, the gentrification frontier is sharply perceived in the minds of developers active in a neighborhood. From one block to the next, developers find themselves in very different economic worlds with very different prospects. The “gentrification frontier” actually represents a line dividing areas of disinvestment from areas of reinvestment in the urban landscape (Smith, 1996, p. 190).” Furthermore, he asserts that, “The economic geography of gentrification is not random; developers do not just plunge into the heart of a slum opportunity, but tend to take it piece by piece....Developers have a vivid block-by-blocks sense of where the frontier lies (Smith, 1996).” This line can be seen in the center of the map between the white area where the harbor has been redeveloped and the black area where most of the households rent and live in poverty. Smith further asserts that, “Gentrification...has become the leading residential edge of a much larger endeavor: the class remake of the central urban landscape (Smith, 1996, p.

39).” Nowhere is this more apparent than in Baltimore’s Harbor East redevelopment.

The Harbor East redevelopment boasts the fanciest skyscrapers, residences, offices and shops.



But this new harbor development was not for the poor residents living several blocks from the harbor. No, as evidenced by the picture above and the lack of affordable housing, this development that redid the eastern waterfront was for the elite.

The effect in Baltimore is not only one of class conflict, but of racial conflict. In 1995, around the time when smart growth took hold in Maryland, 75 percent of poor, black families in Baltimore lived in poor neighborhoods, compared to only 12 percent of poor white people. Around this time, much of the government’s high-rise public housing had become dilapidated and in need of repair. Much of it was torn down to make way for new and improved housing. One news article noted that 2,700 families would be displaced and in need of housing. The American Civil Liberties Union (ACLU) wanted to make sure that the new housing the tenants received was not limited to poor, segregated neighborhoods. The ACLU wanted to make sure that these people had better opportunities to start over, which would have meant finding affordable housing for some of them in the suburbs. But the suburbs fought it tooth and nail.

While the racial component of the gentrification is beyond the scope of this research, class and race are often intertwined. So when the ACLU advocated for giving tenants “certificates good for subsidized rentals anywhere in the regional housing market” in Baltimore, this statement should apply to displaced low-income households, regardless of race. The ACLU’s assertion that, “In the long run... all new developments should set aside a percentage of units for low-income families,” fits the paradigm that in order for development to be truly

sustainable, it must also be equitable and therefore the benefits of development should be permanently available for all income levels (Bock, 1995).

San Francisco: A City that Gets It

Compared to the other developments we examined, the San Francisco bay area by far had the most impressive commitment to affordable housing and sustainability. Many of the developments we identified included housing for low and moderate income residents in addition to market-rate housing.

The San Francisco Bay Area, CA



Figure 14. Percentage of Occupied Housing Below the Poverty Level in the Bay Area, CA

In San Francisco and Oakland alike, the majority of the developments included affordable housing. This does not mean that the pressure to gentrify does not exist; rather it demonstrates a commitment on behalf of the cities to ensure that development is equitable.

Conclusions

Sustainable development is a nationwide phenomenon. Smart growth claims to be a purveyor of sustainability and has been rewarded with accolades for economic development and

environmental performance. It aspires to the ideals of social equity and justice that sustainability puts forth. However, sustainability-smart growth has not yet lived up to its name. The lack of affordable housing found in our data (approximately sixty percent of all developments did not include affordable housing mechanisms) provides initial evidence that sustainable-smart growth development has not yet lived up to its ideals. Given that there is a national lack of affordable housing (Aragoni, 2001) and that mixed use development embodies more of the principles of sustainability than other forms of growth, we propose that the data gives a fairly accurate representation of the state of affordability in sustainable development today. The rhetoric surrounding these developments also suggests that sustainable-smart growth development has become the new guise of gentrification.

There are several limitations to this research. First, this research focused exclusively on mixed used developments. It is possible that in some areas, affordable housing is being built and is much more available than this research suggests. This research also does not investigate the race or age distribution of the affected populations, which could provide insight into other environmental justice aspects of current sustainable development.

In order for development to be equitable, it must consider the needs and desires of existing populations. Public policy should support this goal. Various methods for preserving affordable housing such as policies ensuring that low and moderate income families put no more than thirty percent of their income towards suitable housing, developing community land trusts, and the development of affordable housing-friendly land use codes can all help improve the affordable housing situation (Aragoni, 2001). Further basic research is needed to determine whether or not there is a threshold of affordable housing that can prevent displacement.

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Appendix

List of Smart Growth Policies by State

From Ten Years of Smart Growth: A Nod to Policies Past and a Prospective Glimpse Into

Exhibit 1

State Actions or Programs in Support of Smart Growth Goals

| State | Year | Title | Law |
|---------------|--------------|---|---|
| Florida | 1972 | Environmental Land and Water Management Act | Fla. Stat. 380 et seq. |
| | 1984–85 | Omnibus Growth Management Act | |
| | 1998–99 | Criteria for land use plans, infill development | |
| Hawaii | 1961 | Hawaii Land Use Law | Hawaii Rev. Stats Ch. 205 Act 100 |
| | 1978 | Hawaii State Plan | |
| Oregon | 1973 | Land Conservation and Development Act | S.B. 100, Oregon Stats. 197 |
| Vermont | 1970 | Environmental Control Act | Act 250, 10 Vermont Stats. 151 Act 200, 24 Vermont Stats. 117 Act 280 |
| | 1988 | Growth Management Act | |
| | 1990 | Amendments to Ch. 117 | |
| Maine | 1988 | Comprehensive Planning and Land Use Regulation Act | 30 M.R.S.A. Sec. 4960 |
| Washington | 1990 | Growth Management Act | Sub. House Bill 2929 H.B. 1025 |
| | 1991 | Amendments to 1990 Growth Management Act | |
| New Jersey | 1985 | State Planning Act | NJSA 52-18A-196 et seq. |
| | 1999 | Smart Growth Planning Grants | |
| | 2001 2005 | State Development and Redevelopment Plan Smart Growth Tax Credit Act | |
| Georgia | 1989 | Coordinated Planning Legislation | O.C.G.A. 50-8-1 et seq. |
| | 1992 | Amendments to Planning Law | |
| Rhode Island | 1988 | Comprehensive Planning and Land Use Regulation Act | Rhode Island General Laws, Ch. 45-22 |
| | 2000 | Referenda on developer rights, open space | |
| Maryland | 1992 | Economic Growth, Resource Protection and Planning Act | H.B. 1379 |
| | 1997 | Smart Growth Areas Act | |
| | 2001 | GreenPrint Program | |
| Arizona | 1998 | Growing Smarter Act, transfer development rights act | S. 1238, Ch. 145 |
| | 2000 | Growing Smarter Plus Act | |
| New Hampshire | 2000 | Smart Growth Bill | H.B. 1259 |
| Pennsylvania | 2000 | Growth Area Legislation, transfer development rights | H.B. 14 (Act 67); S.B. 300 (Act 68) |
| Tennessee | 1998 | Growth Policy Law | Public Chapter 1101 |
| Wisconsin | 1999 | Growth Management Law | A.B. 133 S.B. 375 |
| | 2005 | Smart Growth | |

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Exhibit 1

State Actions or Programs in Support of Smart Growth Goals (continued)

| State | Year | Title | Law |
|-----------|------|--|-----------|
| Delaware | 2001 | Comprehensive Plans and Annexation Law | H.B. 255 |
| | | Planning Coordination | S.B. 105 |
| | | Graduated Impact Fees | H.B. 235 |
| | | Reality Transfer Tax for Conservation Trust Fund | H.B. 192 |
| Louisiana | 2004 | Neighborhood Enhancement Program | H.B. 1720 |

Sources: American Planning Association, 2002a; Sellers, 2003; Bollens, 1992; National Conference of State Legislatures' Growth Management Legislative Database

Glossary

Source: http://factfinder.census.gov/home/en/epss/glossary_a.html

Census tract

A small, relatively permanent statistical subdivision of a county delineated by a local committee of census data users for the purpose of presenting data. Census tract boundaries normally follow visible features, but may follow governmental unit boundaries and other non-visible features in some instances; they always nest within counties. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time of establishment, census tracts average about 4,000 inhabitants. They may be split by any sub-county geographic entity.

Family

A group of two or more people who reside together and who are related by birth, marriage, or adoption.

Family household (Family)

A family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in census tabulations. Thus, the number of family households is equal to the number of families, but family households may include more members than do families. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may comprise a group of unrelated people or one person living alone.

Related terms: Household, Householder

Household

A household includes all the people who occupy a housing unit as their usual place of residence.

Household size

The total number of people living in a housing unit.

Household type and relationship

Households are classified by type according to the sex of the householder and the presence of relatives. Examples include: married-couple family; male householder, no wife present; female householder, no husband present; spouse (husband/wife); child; and other relatives.

Householder

The person, or one of the people, in whose name the home is owned, being bought, or rented.

If there is no such person present, any household member 15 years old and over can serve as the householder for the purposes of the census.

Two types of householders are distinguished: a family householder and a nonfamily householder. A family householder is a householder living with one or more people related to him or her by birth, marriage, or adoption. The householder and all people in the household related to him are family members. A nonfamily householder is a householder living alone or with nonrelatives only.

Housing unit

A house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible.

Poverty

Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

Tenure

Refers to the distinction between owner-occupied and renter-occupied housing units.

Related terms: [Housing unit](#), [Owner-occupied housing unit](#), [Renter-occupied housing unit](#)

Thematic map

A map that reveals the geographic patterns in statistical data.

TIGER database

TIGER ® is an acronym for the Topologically Integrated Geographic Encoding and Referencing (System or database). It is a digital (computer-readable) geographic database that automates the mapping and related geographic activities required to support the U.S. Census Bureau's census and survey programs. The U.S. Census Bureau developed the TIGER System to automate the geographic support processes needed to meet the major geographic needs of the 1990 census: producing the cartographic products to support data collection and map presentations, providing the geographic structure for tabulation and dissemination of the collected statistical data, assigning residential and employer addresses to the correct geographic location and relating those locations to the geographic entities used for data tabulation, and so forth. The content of the TIGER database is undergoing continuous updates and is made available to the public through a variety of TIGER/Line ® files that may be obtained free of charge from the Internet or packaged on CD-ROM or DVD from Customer Services, U.S. Census Bureau, Washington, DC 20233-1900.

