



## Are Subdivision Requirements Excessive?

Local governments shape the housing development process with subdivision regulations that dictate infrastructure and site requirements. The primary objectives of these regulations are to ensure that proposed developments meet specified health and safety requirements, are properly designed, and are cost effective, thus minimizing the local governments' long-term maintenance costs. Developers of single-family homes report that complying with subdivision regulations represents a significant expense. The National Association of Home Builders (NAHB) Research Center recently conducted a study for HUD's Office of Policy Development and Research to determine if these regulations exceed what is minimally necessary to achieve their intent, thereby posing unnecessary barriers to affordable housing in many communities across the United States.

### Method

To understand the range of subdivision regulations and to quantify the costs of excessive requirements, the



*Ninety-four percent of American communities mandate one or more land development standards for residential subdivisions, such as lot size, lot width, and floor area.*

NAHB research team collected data on some of the most economically influential subdivision regulations and zoning rules for a nationally representative sample of 469 municipal- and county-level planning jurisdictions. Researchers assembled a team of land and housing experts, including residential land developers, architects, civil engineers, and land planners, to develop benchmarks for the identified subdivision requirements: lot size, floor space requirements, lot width, roadway width, sidewalk requirements, and curb and gutter drainage. The benchmarks set the minimum standards necessary for healthy, sustainable communities.

Subdivision requirements that went beyond the benchmarks were termed excessive and defined as regulatory barriers. The team calculated average regulatory cost estimates for the sample of jurisdictions exceeding benchmark standards. The sample

*continued on page 2*

## contents

Involving Consumers in Home Energy Management 3

What Do Grandfamilies Need? 4

Fostering Local Leadership 6

## Are Subdivision Requirements Excessive? *continued from page 1*

estimate was then used in combination with estimates of single-family building permits from the U.S. Census Bureau's New Residential Construction statistics to arrive at a national estimate of subdivision regulatory barrier costs.

### Findings

Researchers found that 94 percent of the communities mandated one or more land development standards for residential subdivisions. Ninety-one percent had one or more regulatory standards that exceeded the benchmarks, most often exceeding minimums for off-street parking, front setbacks, lot width, and lot size. Among these, the three requirements that gave rise to a disproportionate amount of the excessive regulation were lot size, lot width, and floor area.

- Lot size regulations accounted for 65 percent of total regulatory costs. Sixty-five percent of jurisdictions in the sample surpassed the benchmarks by an average of 6,573 square feet, or one-seventh of an acre.
- Excessive lot width standards accounted for 9 percent of total regulatory costs, with 63 percent of jurisdictions surpassing regulation benchmarks. Undue lot width requirements entail additional land and resources, thereby increasing costs to install sewer and water mains and to pave streets.
- Excessive floor area requirements accounted for 17 percent of total regulatory costs; however, these were attributable to only 8 percent of localities.

The estimated average cost of excessive regulation for one dwelling unit was \$11,910, or 4.8 percent of the average cost of a new home in 2004 (\$244,000). The report estimates that excessive subdivision regulations cost homebuyers roughly \$14.6 billion over the course of the study year. Actual excessive regulatory costs are likely to be greater, since the study only included regulations for the densest zoning districts for single-family detached homes within the sample jurisdictions. If more districts were included, excessive regulatory costs would increase significantly, because residential zones that are less dense generally require larger lot sizes, which result in higher costs.



*Excessive subdivision requirements limit affordable housing nationwide by increasing development costs.*

### Conclusion

Researchers concluded that excessive subdivision requirements limit affordable housing by increasing development costs. The analysis calls for localities to reduce regulatory barriers by balancing affordable housing goals with other community benefits. Analysts suggest that HUD's efforts to reduce regulatory barriers should focus particularly on the largest contributors to excessive subdivision requirements—lot size, lot width, and floor area.

HUD is currently working with states and localities to address regulatory barriers to affordable housing through our Regulatory Barriers Clearinghouse, which collects and disseminates information on the barriers faced in the creation and maintenance of affordable housing, and through the America's Affordable Communities Initiative (<http://www.hud.gov/initiatives/affordablecom.cfm>). Information on barriers and solutions to topics such as building and housing codes, fees and dedications, planning and growth restrictions, and zoning and land development regulations is available at [www.huduser.org/rbc](http://www.huduser.org/rbc).

*Study of Subdivision Requirements as a Regulatory Barrier* is available as a free download at [www.huduser.org/publications/commdevl/subdiv\\_report.html](http://www.huduser.org/publications/commdevl/subdiv_report.html), or in print for a nominal fee by calling HUD USER at 800.245.2691, option 1. **HUD**

Demonstration projects recently completed by the U.S. Department of Energy's Pacific Northwest National Laboratory suggest new approaches for achieving more efficient home energy consumption. The Olympic Peninsula Project tested outcomes in a virtual market, wherein homeowners received the information and technology necessary to fine-tune their control of energy consumption within the home. The Grid Friendly™ Appliance Project tested the effect of placing appliance-load controllers on residential water heaters and clothes dryers.

### Interactive Energy Management

The 112 residences participating in the Olympic Peninsula Project were from cooperating utility service areas in the state of Washington. The region's rapidly growing population is demanding more from the power grid, which is especially vulnerable to failure in severe winter conditions.

Homeowners responded to a well-publicized recruitment campaign and were selected for the year-long study based on several criteria. Participating homes needed to be equipped with high-speed Internet service, an electric HVAC system with 1 or 2 thermostats, an electric water heater with a capacity of at least 30 gallons, and an electric clothes dryer. The homeowners agreed to live in their homes during the project, substitute their revenue meters with advanced versions developed for the research, modify their home's electrical setup, and attach control boxes to walls. In addition, they were required to take pre- and post-surveys, interact with project equipment to select desired levels of comfort and cost savings, and allow

access to the equipment in their homes for installation, maintenance, and removal. Motives for participating in the project included use of the equipment, a small cash incentive, and taking part in research that could advance efficiency and cost savings for homeowners.

The selected homeowners were assigned to one of three subject groups or to a fourth control group. Those in the control group had the project equipment installed in their homes but had no further contact with the demonstration. The other three groups received information and the equipment needed to manage their home energy systems. They could go online at any time during the project to review their energy consumption histories, in aggregate or for any 15-minute interval.

Participants in the fixed-price group were told that they did not need to modify their usual patterns of energy use, but they could choose to use more or less electricity to control their utility bill. The price of electricity would remain constant at 8.1 cents per kilowatt-hour, whatever their decision.

Participants in the time-of-use/critical-peak group could choose to reduce their utility bills by changing the time period during which they used electricity. The price of electricity varied for this group according to off-peak, on-peak, and critical-peak times. The lowest cost rate (off peak) was applied to midday, night, and weekend hours, when demand tends to be lower. The price for weekday early morning and early evening hours (on peak), when demand is highest, was set higher than participants were currently paying. The critical-peak rate was applied at times of power shortages or electrical grid emergencies and was much more expensive than the on-peak rate. Critical-peak events were rare, lasted no more than four hours, and were preceded by advance notice. Participants were able to set their equipment for comfort levels and to respond automatically to price signals, but they could also override the settings at any time.

A real-time pricing group received actual price information that not only varied every five minutes, but also changed in unpredictable ways. This demanded the greatest degree of consumer involvement and modification of energy usage of any of the groups. Members of this group went online to set and adjust automatic responses to price information. When prices



*Homeowners in the Olympic Peninsula Project reduced their energy costs by using electricity at off-peak times and adjusting their home energy system controls to reduce consumption.*

*continued on page 5*

## What Do Grandfamilies Need?

"Grandfamilies" are households headed by grandparents or other relatives who stand in for parents to raise children. According to the last census, grandparents are raising six percent of the nation's children, but the total number of grandfamilies is uncertain. Observers attribute this family structure to a number of social conditions, including parental drug abuse, AIDS, divorce, teen pregnancy, and child abuse. Although their circumstances vary widely, grandfamilies often face legal, health, and financial challenges that affect their housing needs.

### Housing Needs

Housing poses the greatest difficulty for many grandfamily households, who must accommodate the needs of both elderly and minor members. Although at least one-fourth of these households live in homes too small to accommodate them, they often cannot afford a larger space. Assisted housing for seniors typically is not suited for children. In addition, grandfamilies headed by those who are not elderly, are not low-income earners, or do not have a legal relationship with the children, may not qualify for housing assistance.

HUD's Office of Policy Development and Research and the U.S. Census Bureau have worked together to learn more about the neediest of these households and their housing requirements. This collaborative effort is reported in *Intergenerational Housing Needs and HUD Program Options: Report to Congress*. The work focuses on 2.7 million households headed by grandparents and other relatives. Scattered throughout the 50 states and the District of Columbia, many of these families live in their own homes or have too much



*Many grandfamilies lack accessible housing with adequate space that can meet the needs of both seniors and children.*



*Grandparents are raising six percent of the nation's children and face a variety of legal, health, and financial challenges that affect their housing needs.*

income to be eligible for housing assistance. The most severe housing challenges within this segment are among households with priority housing needs, who pay 50 percent or more of their income for housing and/or have inadequate housing with severe plumbing, heating, electrical, upkeep, or hallway problems.

### What Can Be Done?

Existing housing programs were not designed with grandfamilies in mind, a condition that sometimes deprives these households of the resources they need to ensure healthy home environments where children can thrive. The findings about grandfamilies with priority housing needs raise policy questions concerning special targeting for these family units, as well as the appropriate role of local and federal governments in assisting them. The report recommends that the federal government offer these households additional Section 8 Housing Choice Vouchers, amend Section 202 and 811 programs to address the needs of grandfamilies, and encourage state and local governments to use HOME and Community Development Block Grant funds to develop housing designed for eligible grandfamilies. In the Legacy Act of 2003, HUD was directed to train personnel in how existing affordable housing programs can serve these families. The Department was also to implement a demonstration program for providing supportive housing to intergenerational families. Funding appropriations for demonstration research, however, have been limited.

Meanwhile, some multifamily developers are constructing model projects that combat the housing problems grandfamilies face. These grandfamily projects have unique features that separate them from

*continued on page 5*

## Involving Consumers in Home Energy Management *continued from page 3*

were high, they could choose to use less electricity and override their own programming.

Consumers participating in the research saved an average of 10 percent on their utility bills. The time-of-use households reduced their consumption significantly more than other groups and enjoyed off-peak savings as well. Both of the price-responsive contracts, time-of-use and real-time, appealed to the participants. Consumers tended to set controls according to preference and leave them to operate automatically, but the ability to override settings also seemed important to participants. Members of one family that reduced its consumption of electricity by 15 percent related how much they had learned about using and saving electricity while becoming more aware of their comfort and tolerance levels. They appreciated the ability to override their own settings: "It [was] great fun to sit at a picnic table in an RV park and jump online through a Wi-Fi connection to tell the water heater and heat pump in our house to wake up and get to work, we're coming home early."<sup>1</sup>

### Managing the Grid

In the Grid Friendly Appliance Project, controller devices were placed on 50 water heaters and 150 clothes dryers in homes in Oregon and Washington. Whenever the electric power grid's voltage fell below 59.95 Hertz, the monitor/controller signaled its appliance to shed its electrical load for as long as the underfrequency event lasted. These brief events,

1. Pacific Northwest National Laboratory, "Pacific Northwest GridWise™ Testbed Demonstration Projects. Part I. Olympic Peninsula Project," October 2007, p. 8.12.



*Appliance-load controllers on clothes dryers and water heaters shut off the appliances whenever the electric power grid's voltage drops below 59.95 Hertz.*

ranging from a few seconds to 10 minutes, largely went unnoticed by consumers. Nine out of 10 participants in this project agreed that it would be acceptable to have the Grid Friendly feature as a standard or added option on a new water heater or clothes dryer.

### Research Conclusion

The complete reports of these demonstration projects ([www.pnl.gov/news/release.asp?id=285](http://www.pnl.gov/news/release.asp?id=285)) relay methods, outcomes, and perspectives of cooperating utility companies, consumers, the system integrator, and equipment manufacturers. Although these demonstration projects revealed a number of constraints and new questions, particularly from the perspective of utilities and appliance manufacturers, one important conclusion was that consumers equipped with enhanced information and adequate tools tend to make better-informed decisions about energy use. **HLI**

## What Do Grandfamilies Need? *continued from page 4*

typical multifamily housing developments. The two projects described below provide units that are accessible, offer amenities tailored to elderly residents, and are large enough to accommodate a growing family. The projects also integrate supportive services tailored to multigenerational family needs.

In 1998, the GrandFamilies House—the first housing program in the nation designed for grandparent-headed households—opened in Boston. It features 26 apartments, each with 2 to 4 bedrooms, that address the needs of both seniors (grab bars in the bathrooms) and children (childproof electrical outlets).

The development received 100 tenant-based Section 8 vouchers, allowing tenants to spend no more than 30 percent of their income on rent. Onsite supportive services designed to meet intergenerational family needs include a service coordinator and manager, security and maintenance services, a social worker, a preschool, afterschool programs, a computer learning center, summer day camp, and both educational and recreational activities for grandparents.<sup>1</sup>

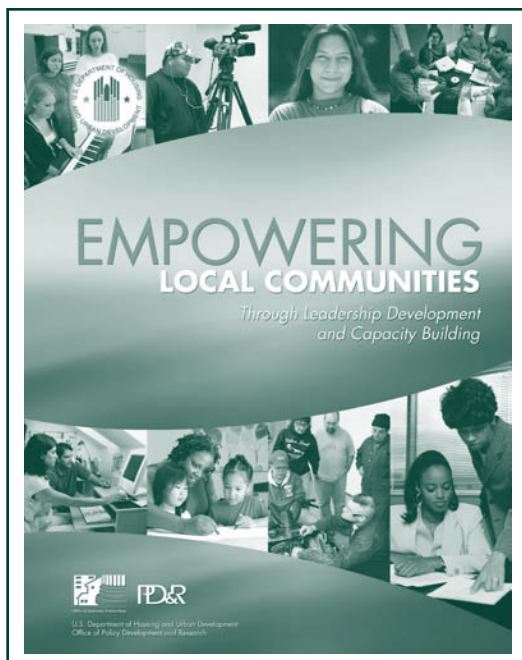
*continued on page 7*

1. "Mind the Gap: Grandparents Raising Grandchildren," *Communities & Banking*, Spring 2002 ([www.bos.frb.org/commdev/cEtB/2002/spring/gf.pdf](http://www.bos.frb.org/commdev/cEtB/2002/spring/gf.pdf)).

HUD's Office of University Partnerships (OUP) encourages its grantees to pursue initiatives to strengthen community leaders today and to build capacity for the future. Through interviews with grantees, local residents, and leaders of local community-based organizations (CBOs), OUP found that these efforts are bearing fruit, as described in the new report *Empowering Local Communities Through Leadership Development and Capacity Building*. The report profiles successful CBO efforts at colleges and universities across the country, featuring five initiatives that teach leadership skills to community residents and five efforts to build the capacity of CBOs. As these highly committed OUP partners seek to fulfill OUP's goals in their communities, they are building stronger cities, colleges, and universities.

### Building Leadership Skills

Teaching residents and organizations how to develop relationships with partners is a key aspect of OUP grantees' efforts to strengthen local leadership. For instance, Lisa Knickmeyer, a graduate student at the University of Maryland, Baltimore, built on relationships established during her internship to develop a center for victims of domestic violence in her neighborhood. The successful center now relies on these many ongoing partnerships.



*OUP grantees work closely with local community organizations and residents to maximize assets and strengthen leadership skills.*

The role of partnerships is an important aspect of the leadership courses that some OUP grantees offer to community residents. For example, the residents of Washington's Yakima Valley who participated in Heritage University's Public Leadership and Civic Engagement Academy explained to OUP researchers that the relationships they forged with local community development leaders were the highlight of their seven-month program. Now these relationships are helping Yakima Valley's newest leaders form long-term partnerships to improve the community.

This OUP grant has fostered new relationships and encouraged young people to aspire to be community leaders. Lance Garner, a high school student enrolled in Hawaii Community College's program for at-risk teens, learned to respect other adults and his own leadership qualities as the program teachers showed him respect. The healing power of relationships is also evinced by the Tennessee State University students who serve as role models for inner-city children in afterschool programs at the Friendship Community Outreach Center in Nashville. The children are inspired to improve their behavior based on their relationships with the college student leaders, and they have begun to see the value of going to college.

OUP grantees are helping maintain and strengthen leadership skills. For example, the leadership training that Southern University in Shreveport, Louisiana provides to the Shreveport Housing Authority's Resident Advisory Board helps longtime board members refresh the sense of personal mission that first spurred them to become leaders.

### Building Capacity

Capacity building is a challenging process, because it means giving resources to an often-struggling organization and then patiently assisting, but not interfering, as it tries to move forward on its own. Many of the OUP grantees featured in the report have found that capacity building means recognizing that an organization might *not* thrive, even with all the assistance that the grantee can give. Nevertheless, grantees play a crucial role in building capacity, rather than taking over when an organization faces challenges.

This role is particularly well-illustrated by Santa Ana College in California, which sponsors a Microenterprise Center for Child Care Providers with funds from its

*continued on page 7*

## What Do Grandfamilies Need? continued from page 5

Presbyterial Senior Services (PSS) also created a housing option for grandfamilies—the PSS GrandParent Family Apartments in New York's South Bronx neighborhood. The apartments, better known as the Grandfamily Apartments, are the result of initiatives taken by a support group of grandparents raising grandchildren. First opened in 2005, the complex includes energy-efficient equipment and has 50 units for tenants earning less than 50 percent of the area median income. Each unit has 2 or 3 bedrooms, handrails in the bathrooms, an intercom system, and a master bedroom. Subsidized by the New York City Housing Authority, residents pay no more than 30 percent of their income for rent. In addition to the amenities offered onsite, the neighboring David Senior Center offers services such as support groups for kinship caregivers and walking clubs for grandparents.<sup>2</sup>

More information on these grandfamily housing strategies is available at [www.housingfinance.com/ahf/articles/2006/aug/050\\_ahfaug06.htm](http://www.housingfinance.com/ahf/articles/2006/aug/050_ahfaug06.htm) and [www.fanniemaefoundation.org/grants/casebook12/bac-profile.html](http://www.fanniemaefoundation.org/grants/casebook12/bac-profile.html). To download *Intergenerational Housing Needs and HUD Program Options: Report to Congress*, see [www.huduser.org/publications/affhsg/int\\_genrtnl.html](http://www.huduser.org/publications/affhsg/int_genrtnl.html) or call 800.245.2691, option 1, to obtain a print copy for a nominal fee. In addition, excellent sources of information about multigenerational family needs and resources are Generations United ([www.gu.org](http://www.gu.org)) and AARP's Grandparent Information Center ([www.aarp.org/families/grandparents](http://www.aarp.org/families/grandparents)). **HLI**

2. "Affordable Housing Initiatives for Grandparents Raising Grandchildren," Human Services Division, New York City Council, November 22, 2005 (<http://webdocs.nycouncil.info/attachments/69954.htm?CFID=1266668&CFTOKEN=70621011>).

---

## Fostering Local Leadership continued from page 6

Hispanic-Serving Institutions Assisting Communities (HSIAC) grant. When Gloria Guzman, the codirector for this grant, was asked to serve as president of a new association of Spanish-speaking child-care providers, she instead offered to help the association's members build their own capacity. Guzman has spent six years helping the association formally organize and become self-sufficient.

A key resource for capacity building is information about a community's assets and challenges, which institutions of higher education are well equipped to supply to CBOs. For instance, University of Pittsburgh students supplied information to Hazelwood Initiative, Inc. that dramatically improved its capacity to develop a work plan, receive funds to hire an executive director, and pursue its mission to be a catalyst for fostering a healthy community.

Another important aspect of capacity building is targeted research on local issues, which OUP's Community Development Work Study Program (CDWSP) and Doctoral Dissertation Research Grant (DDRG) grantees can provide. To illustrate, DDRG grantee Ryan Allen of the Massachusetts Institute of Technology helped the Maine Department of Labor and Catholic Charities Maine study how refugees could supplement the state's aging labor force. Research by CDWSP grantee Jackie Tsou, conducted while

in graduate school at the University of California, Berkeley, is enabling CBOs in Richmond, California to pursue a green economic development strategy for low-income residents.

The provision of services and benefits also contributes to capacity building, particularly by creating goodwill among an institution of higher education and its community partners. For example, the grant resource office at Otero Junior College in La Junta, Colorado offers technical assistance to nonprofit organizations. This was established in May 2006 with funds from a HUD HSIAC grant. The office has helped community groups obtain more than \$100,000 in grant funds, thereby building local capacity and laying a foundation for future cooperation with these partners.

### **An Opportunity To Replicate Success**

*Empowering Local Communities Through Leadership Development and Capacity Building* offers both inspiration and practical approaches to developing and managing leadership development and capacity-building initiatives, and it provides contact information for the people responsible for the featured initiatives, so that readers can learn more about how to replicate them. The complete report can be downloaded at no cost at [www.oup.org/files/pubs/empowerment.pdf](http://www.oup.org/files/pubs/empowerment.pdf). For additional information on all OUP activities, visit [www.oup.org](http://www.oup.org). **HLI**

**U.S. Department of Housing and Urban Development**

HUD USER

P.O. Box 23268

Washington, DC 20026—3268

PRESORTED  
FIRST-CLASS MAIL  
POSTAGE & FEES PAID  
HUD  
PERMIT NO. G—795

Official Business

Penalty for Private Use \$300

Return Service Requested

In the Next Issue of... <sup>research</sup> **works**

- Government-Sponsored Enterprises (GSEs) are charged with leading efforts by the mortgage finance industry to make credit accessible to low- and moderate-income families attempting to purchase a home. We'll review a recently published evaluation of how well GSEs achieved this objective during the 1990s.
- The U.S. housing industry increasingly adopts Leadership in Energy and Environmental Design standards developed by the U.S. Green Building Council for designing and building durable and cost-efficient homes. These standards have also been helpful in deciding how to meet the unique challenges inherent in developing green affordable housing for low- and moderate-income families. We'll examine the challenges and how they are being addressed by the affordable housing community.
- Three affordable housing developments received the 2007 HUD Secretary's Best in American Living Award for design excellence and innovation in affordable housing. ResearchWorks looks briefly at the award-winning features of each of the affordable housing developments: Falcon Crest in Palm Desert, California; the Roanoke and Lee Street Housing Project in Blacksburg, Virginia; and the Nevada Court Project in Denton, Texas.
- Housing attainable by low- and moderate-income families, who earn from 30 to 120 percent of an area's median income as essential services personnel, is becoming an urgent community economic issue. Using the 2005 American Housing Survey data, the Center for Housing Policy has updated the national picture of critical housing needs among working families. ResearchWorks explores this workforce-housing problem and the approaches taken to provide relief to workers and their communities.

www.huduser.org • 800.245.2691



U.S. Department of Housing  
and Urban Development  
Office of Policy Development  
and Research

