

Double Standards, Single Goal: Private Communities and Design Innovation

ERAN BEN-JOSEPH

Department of Urban Studies and Planning, Massachusetts Institute of Technology, Cambridge, MA, USA

ABSTRACT *Some 47 million Americans—one in six—live in communities run by collective private ownership of residential property. The spread of home-owner associations, condominium associations and cooperatives is transforming planning practices and development design. A nation-wide survey of municipalities and developers demonstrates the existence of two sets of standards and design parameters: those that pertain to the public domain and those applied to private communities. Public officials often regard the latter, with their privately owned streets and open spaces, as a tool for promoting flexible planning, frequently resulting in innovative and efficient land use and original layouts, characteristics absent from conventional subdivisions. Developers see private communities as a medium for a simplified approval process and the introduction of design innovation. They are using private development to push the density and efficiency envelopes while protecting environmental resources and increasing marketability and financial returns. Public officials agree that because local government has no legal or maintenance responsibilities for private development, and is thereby cleared from liability concerns, such communities often use land more efficiently, through clustering and narrow-street systems. We must recognize that the current practice of allowing different sets of standards for private developments acknowledges the inadequacy of standards applied to public ones, and validates the impression that typical regulations are not determined by actual performance, marketability or good design.*

Introduction

The *de facto* legal and regulatory landscape of the USA has been radically altered by the vigour and popularity of small managed places. The last part of the 20th century witnessed record growth of private residential communities. Collectively referred to as common interest communities (CICs) or common interest developments (CIDs), these communities rely on covenants, conditions and restrictions to privately govern and control land use, design decisions, services and social conduct. The communities own, operate and manage the residential property within their boundaries, including open space, parking, recreational

Correspondence Address: Eran Ben-Joseph, City Design and Development, Department of Urban Studies and Planning, Massachusetts Institute of Technology, 77 Massachusetts Ave 10-485, Cambridge, MA 02139, USA. Email: ebj@mit.edu



Figure 1. Taking the form of condominiums, cooperatives and single- and multi-family homes, CICs are spreading. Altogether, some 47 million people—one in six Americans—live in developments run by cooperative and home owner associations. Singer Island, FL, typifies such models. All developments seen in this image, from single-family homes to high rises, are CICs run by collective private ownership of residential property and outdoor space.

facilities and streets. Although CIDs have historically been the domain of the affluent, they are now becoming the choice both suburban and urban residential development. Taking the form of condominiums, cooperatives and single- and multi-family homes, gated and non-gated private communities are spreading, world-wide, across diverse economic and social classes. This phenomenon is causing an unprecedented transition from the traditional individual ownership of property to collective governance of most property in the USA. This is a remarkable move from the individual ownership of property that has been part of the tradition of the US political and economic landscape. The trend, at the very least, establishes a new micro-scale level of government beneath our municipal structures (Figure 1).

Indeed, the numbers provide a clear indication of this movement's strength. At the end of the 20th century, about 47 million Americans lived in condominiums or within cooperative and home-owner associations. Growing from 500 various neighbourhood associations in the 1960s to an estimated 231 000 in 1999, home-owner associations now comprise almost 15% of the national housing stock, with an estimated addition of 8000–10 000 private developments each year (Community Associations Institute, 1999). In the 50 largest metropolitan areas, more than half of all new housing is now built under the governance of neighbourhood associations. In California—particularly in the Los Angeles and San Diego metropolitan areas—this figure exceeds 60% (Treese, 1999).

Such authors as Barton & Silverman (1994), Blakely & Snyder (1997), Nelson (1999) and McKenzie (1994, 1998, 2003) suggest that CICs' spread is driven by the mutual interests of developers, consumers and local governments (including planning officials). Developers benefit because they can maintain profits—despite high costs of land and infrastructure—by introducing efficient land design schemes and, often, higher densities. Consumers, in their increased ability to control their neighbourhood character and aesthetics through compliance and

enforcement mechanisms, see a way to protect their property value. They also see CICs as providing greater infrastructure provisions, recreational amenities and community services. Local governments prefer CICs because they privatize infrastructure and reduce public costs. As McKenzie (2003, p. 207) states, "The cities can acquire new property tax payers without having to extend them the full panoply of municipal services and thereby making Common Interest Developments 'cash cows' for local government. Some municipal governments have begun to virtually *require* that new housing construction consist of Common Interest Developments" (emphasis in original).

The growing fiscal crisis of many local governments often means that they are unable to accept such demands as building and maintaining streets, collecting rubbish and providing other services. In response, the establishment of a separate legal mechanism within a community, such as a neighbourhood association, allows collective control over a neighbourhood's common environment and the private provision of common services. Perhaps more importantly, this also creates a *de facto* deregulation of municipal subdivision standards and zoning because cities and towns allow for a different, more flexible set of standards to be implemented in such developments. Often, the results are innovative spatial and architectural layouts, and, sometimes, unusually sensitive environmental design. Such a shift in neighbourhood governance enables a resultant shift in the design of residential developments, a shift that heretofore has not been fully appreciated.

How widespread is this phenomenon? Can the assertion made by Barton & Silverman (1994), McKenzie (2003) and others be corroborated? What are the attitudes and perceptions of public officials and developers with regard to subdivision regulations and their impact on privately managed and controlled communities? In addition, do some of these developments indeed push the planning envelope to attain desirable design outcomes such as increased densities?

To shed some light on these questions, this paper starts by discussing the spread of private communities. It continues by bringing in survey results which assess the attitudes and perceptions of public officials and developers in the USA. The paper concludes with two examples of subdivisions which chose private governance in order to achieve their planning and design objectives.

The Dichotomy of Common Interest Communities

Typically, urban planners and sociologists bemoan the growing popularity of private communities. Davis (1990), in *City of Quartz*, and Garreau (1991), in *Edge City*, lament the replacement of the pluralistic city by spatial segregation. They see this spatial segregation as resulting in the marginalization of exclusive residential, retail and transportation spaces. Blakely & Snyder (1997), Lang & Danielsen (1997), Stark (1998) and Franzese (2002) describe private community regulations, such as prohibiting pets, limiting how long a garage door may be left open, the amount of grass, trees and shrubs on a property and the kind and colour of window treatments. Barton & Silverman (1994) claim that common interest communities fail as participatory democracies because their properties do not reduce, but rather intensify, conflicts within the community, as people assert their property rights against one another. Furthermore, many of these

communities are home to renters who have no voting rights or due representation in decision making about the places they live in.

Private communities, particularly gated ones, are also the target of social critics who see in them an exclusionary and elitist means by which the rich can physically segregate themselves from the lower and middle classes (Guterson, 1992; Marcuse, 1997). Low (2001) (cited in McKenzie, 2003, p. 224) suggests that the urban fear drives people to live behind gates: "Gated communities respond to middle-class and upper-middle-class individuals' desire for community and intimacy and facilitate avoidance, separation, and surveillance". On the other hand, Lang & Danielsen (1997) suggest that such communities also keep the wealthy in the inner city or attract them back to it. They suggest that whereas the neighbourhoods themselves may not be integrated, the city as a whole becomes more mixed.

It should also be noted that, although CICs are often gated and walled, there are both private communities that are *not* gated, and public development, such as public housing, that is. In fact, most CICs—72%—do not have any security system in place, while 11% have staffed gates or coded gate systems, and 17% have security patrols (Community Associations Institute, 1999). Furthermore, the 2001 American Housing Survey (AHS) suggests that the desire for separating and living behind gates traverses economic class and race. Analysing the AHS, Sanchez & Lang (2002) show, contrary to the notion that all gated communities are affluent and predominately white, that there are also gated communities inhabited by minority renters with moderate incomes. According to the data, renters, who are more ethnically diverse and less affluent, are nearly 2.5 times as likely as home-owners to live behind gates or walls, and over 3 times as likely to have controlled entries. Regardless of being renters or owners, Hispanics are more likely to live in such communities than whites or blacks.¹

Private CICs are also gaining diversity in types of housing. The Community Associations Institute (1999) survey indicates a general distribution of about 67% single-family homes, 15% condominiums/apartments, 14% townhouses and duplexes and 2% mobile homes. Two-thirds of the associations surveyed have fewer than 500 units, 6% have 500–999 and another 6% have 1000 or more.

CICs are rapidly being popularized in other parts of the world. Recent press coverage and research from Europe, Africa, South America and Asia suggest a global phenomenon. The *Economist* (2002) revealed that former Prime Minister Margaret Thatcher moved into a "gated community" in south London, and that, although gated communities are still rare in Britain, "many people in Britain like the idea of living somewhere safe, fenced-off and privately guarded" (*Economist*, 2002, p. 49). In South Africa, where secure communities were an unavoidable consequence of racism, post-apartheid gated private developments are inhabited by all races and not only by the rich (Jürgens & Gnad, 2002; Robins, 2002). In Saudi Arabia, private compounds of linked houses provide extended families with privacy and identity. Such privately owned compounds seem to be a reaction to the single residential typology imported from abroad during the country's modernization period (Glasze & Alkhayyal, 2002). Since the early 1980s and the economic reforms, more and more residential areas in Chinese cities have walled themselves in order to improve security and define social status (Miao, 2003). Private communities in South-east Asia, such as in Indonesia, are marketed as places that allow the differentiation of lifestyle, and give prestige and security to their inhabitants (Leisch, 2002). In Latin America,

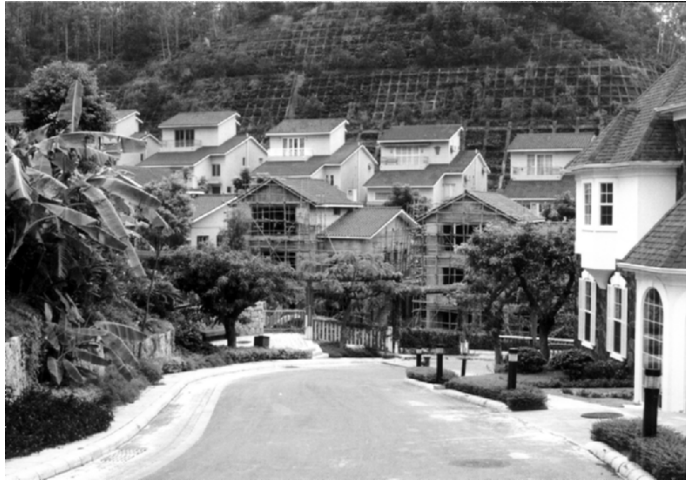


Figure 2. Private CICs are also gaining popularity in other parts of the world. Many of these communities, such as this one in Shekou, Shenzhen, China, are designed by US companies and are based on US planning and design standards.



Figure 3. In Latin America, sprawling private gated communities at the metropolitan edge of cities such as Santiago, Chile, have become the norm for a growing sector of the population in search of security and efficient privatized 'public' services.

sprawling private gated communities at the metropolitan edge of cities such as Santiago and Bogotá have become the norm for a growing professional class in need of a relatively secure lifestyle in an environment dominated by social and economic poverty (Coy & Pöhler, 2002). In Buenos Aires, the deteriorating political and economic situation has resulted in developers and private companies controlling and providing privatized 'public' services. Such services attract large sectors of the population to large private developments, in which 0.5 million people now live (Pírez, 2002) (Figures 2 and 3).

Dual Governance—Dual Rules—Dual Design Outcomes

The proliferation of CICs and privately owned and managed residential subdivisions in the USA is also backed up by the results of the author's recent nation-wide survey of public officials and developers. The survey indicates that within the majority of the jurisdictions surveyed (84% or 130 jurisdictions), privately owned subdivisions are allowed to be built.² Out of these 130 jurisdictions, 63 (43%) have seen the construction of 10 or more private subdivisions in the last five years.

This study gauged the impacts of subdivision regulations on the design of residential developments and the practices of developers in rapidly growing regions of the USA. In the summer of 2002, 500 developers and 500 public officials were mailed a questionnaire soliciting response and support for this undertaking. The sample selection was based on the US Census Manufacturing and Construction Division (MCD) building permits data 1996–2000 according to the four MCD regions: north-east, mid-west, south and west. (For detailed descriptions of the selection process and the sampling steps as well as various data on the jurisdiction selected, see Appendix.)

The survey assessed the attitudes and perceptions and identified the issues within subdivision regulations that members of the housing industry and the regulatory agencies feel are affecting housing development. It also asked about the extent and nature of privately owned and managed subdivisions.

Regulatory Perception

When and to what extent have government regulations become a burden on the housing industry? Are regulations blamed for the ills and problems of executing efficient developments? In *Ecological Design*, Van der Ryn & Cowan (1996, p. 9) write:

City planners, engineers, and other design professionals have become trapped in standardized solutions that require enormous expenditures of energy and resources to implement. These standard templates, available as off the shelf recipes, are unconsciously adopted and replicated on a vast scale. The result might be called dumb design: Design that fails to consider the health of human communities or of ecosystems.

Like Van der Ryn & Cowan (1996), many others have called for regulatory reforms and alternative solutions to bring better design resulting in efficiency and site suitability. As early as 1916, Frederick Law Olmsted, Jr commented on housing regulations thus:

...while such regulations are intended only to guard against the evil results of ignorance and greed on the part of landowners and builders, they also limit and control the operations of those who are neither ignorant nor greedy; and it is clear that the purpose in framing and enforcing them should be to leave open the maximum scope for individual enterprise, initiative and ingenuity that is compatible with adequate protection of the public interests. Such regulations are, and always should be, in a state of flux and adjustment—on the one hand with a view to preventing newly discovered abuses, and on the other hand with a view to opening a wider opportunity of individual discretion at points where the law is found to be unwisely restrictive. (Olmsted, 1916, p. 3)

Albert Bemis, writing in 1934, asserted that “compliance with minimum standards with respect to street grading and the installation of water mains and sanitary sewers often may increase the total home cost as much as 20 percent” (in Seidel, 1978, p. 119). J. C. Nichols, who in 1906 started the famous Country Club District in Kansas City, declared that “the building codes of many of our cities are obsolete, drawn to favor certain industrial trades and certain types of merchandise which create unnecessary cost of home construction” (Nichols, 1945, p. 6).

Seidel (1978) showed that subdivision regulations have very little relationship to minimum health and safety safeguards, and thus unnecessarily drive up the cost of housing.

Two surveys by the National Association of Home Builders, in 1964 and 1969, showed that at that time, government regulations were not seen as a significant problem by the housing industry. In the 1960s, construction costs, finance, labour costs and lack of skilled labour were seen as the major obstacles in developing. In 1964, for example, over 25% of the respondents indicated both construction finance and labour costs as the primary obstacles, and only 6.1% indicated codes as being an issue (Seidel, 1978).

By the 1970s a dramatic shift in the relative importance of the problems had taken place. Government regulations as well as financing difficulties had become the central problem of the industry. According to Seidel (1978), in 1976, 78% of respondents chose government-imposed regulations as a problematic issue in doing business. Problems in obtaining financial help and mortgages were chosen by more than half of the respondents. By 2002, financial issues completely disappear, while imposed regulations and the availability of suitable land for development continue to dominate as the main triggers of hardship.

The measurement of government regulation as a perceived problem can also be seen in the simple weighting scheme applied to the given answers. In the case of the 2002 study, the weighted response shows government regulation with a total score of 39.1 (compare to a total score of 30.0 for the 1976 results) (Table 1 and Figure 4).

These figures are also reflected in these frequently repeated comments offered by the developers.

- “Regulatory agencies exceed their authority to practice social engineering, architecture, and micro-management.”
- “Subdivision codes don’t allow any flexibility. They are too standardized. More flexibility in subdivision codes is desperately needed.”

Table 1. Three most significant problems in developing, 1976, 2002: percentage of respondents selecting

Rank	Percentage of developers, 1976 (n = 2176)	Percentage of developers, 2002 (n = 86)
1	Government-imposed regulations 78%	Government-imposed regulations 73% (SE 4%)
2	Unavailable financing 58%	Lack of suitable land 51% (SE 5%)
3	Lack of suitable land 50%	Lack of market demands 24% (SE 4%)

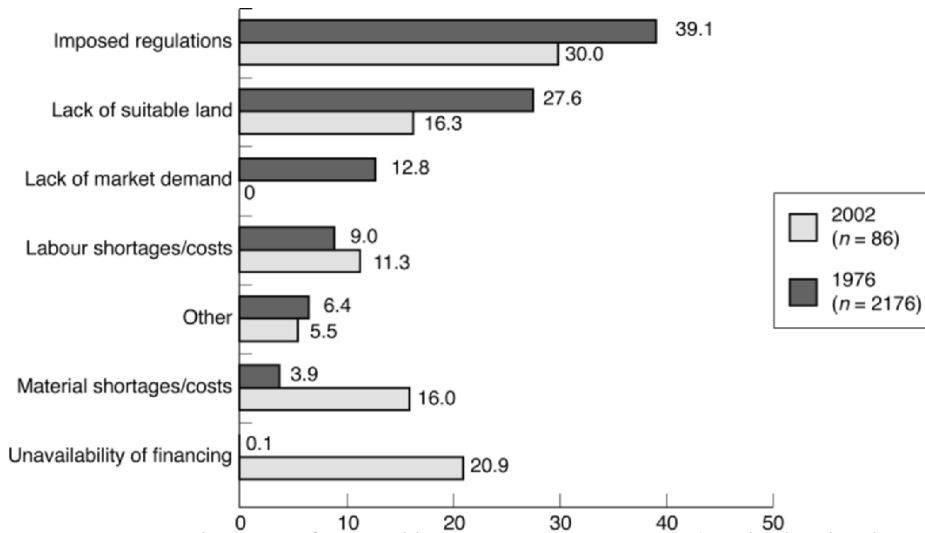


Figure 4. Housing industry significant problems comparison, 1976–2002 (weighted scale selection). Data for 1976 are based on a 3, 2, 1 weighted scale with totals divided by a factor of 6; data for 2002 are an average of respondents’ three, non-scaled, selections. *Source:* Data for 1976 are from Seidel (1978).

- “City and county offices have no sense of fairness. They are only interested in exactions and imposing regulations that make them appear more successful in protecting the community from the ‘evil’ developer that may be trying to be profitable.”

Excessive Standards

Developers clearly expressed their frustration with the excessive and often unwarranted nature of physical improvements and standards associated with subdivision development. When asked to indicate which requirements present the greatest expense, in conforming to regulations, an overwhelming majority (80%) pointed to requirements associated with site design (Table 2).

When asked to indicate which requirements they perceived as excessive, 52.2% of the respondents indicated requirements relating to street construction, with 44.6% indicating land dedication and 43% storm sewers (underground piping for storm water mitigation). When asked to indicate more specifically which physical standards within each category were seen as excessive, the most

Table 2. Requirements presenting the greatest expense

	Site design	Building design	Materials	Construction techniques
Percentage of respondents (<i>n</i> = 81)	80.1	52.3	46.3	37.5
Standard error of estimate	4%	5%	5%	5%

frequently cited were street widths (75% of the respondents), street rights-of-way (73%) and requirements for land for open space (73%) (Table 3).

While one might expect that developers will criticize regulations and see them as interfering in their business, it is important to note that most respondents were selective in their answers to the survey. As can be seen in Table 3, out of 29 listed requirements only 13 were seen by the majority of developers as excessive while 16 others seemed reasonable. Such a distribution indicates that many developers are in tune with construction and design performance and their attitude towards regulation cannot always be assumed as negatively

Table 3. Developers' assessment of various requirements
(percentage of respondents, *n* = 79)

Requirement	Excessive	Not excessive	Standard error of estimate
Street width	75		4.5
Street right-of-way	73		4.6
Pavement thickness		62	5.2
Kerbs		83	4
Sidewalk width	56		5
Sidewalk thickness		70	4.7
Water pipe diameter		55	5
Water pipe material		80	4
Water pipe depth		93	2.6
Water pipe hook-up fees	85		3.7
Sewer pipe diameter		72	4.6
Sewer pipe material		75	4.5
Sewer pipe depth		70	4.7
Sewer hook-up fees	90		3
Sewer system layout		56	5
Storm water pipe diameter	62		5
Storm water pipe material		50	4
Storm water pipe depth		45	5
Storm water pipe hook-up	57		5
Storm water system layout	73		4.6
Street trees	73		4.6
Street lighting		52	4
Telephone lines		53	4
Electric lines	60		5
Cable/television lines		64	5.4
Land for recreation	52		4
Land for open space	73		4.6
Land for schools		65	5.4
Fee in lieu of land	79		

biased. Furthermore, the public officials surveyed (town planners and town engineers) often concurred with the developers' observations. Generally, these officials agreed that the regulatory process, such as the enforcement of subdivision regulations, has become more demanding and complex. For example, over the past five years, 70% of the jurisdictions where these public officials work have introduced new requirements, and 57% have increased specifications, such as those for setbacks and lot sizes. Only 16% of these jurisdictions have decreased their specifications, mostly by reducing street widths.

Relief from Regulations

Government regulations, particularly those pertaining to the design and control of subdivisions, are seen by two-thirds of residential developers as the main culprit in prohibiting design innovation and increasing the cost of housing. More specifically, they see these regulations as an impediment to increasing densities, changing housing types and reconfiguring streets and lots.

One way in which developers try to relax these regulations is through zoning relief and variance requests. Indeed, more than half (52.1%) of the developers surveyed had to apply for some sort of relief in at least half of their projects, while 36.6% had to apply in at least three-quarters of their projects. When asked to point to the type of changes they applied for, many indicated that they wanted to build higher-density single-family projects, include more multi-family units, and would create more varied site and structural plans if they had the opportunity. Table 4 shows that the majority of the developers surveyed indicated that they sought to increase densities of housing units on their site. Seventy-two per cent indicated that because of existing regulations they had to eventually design lower-density developments than they had intended. In some instances, according to the developers, regulations forced them to build in greenfield locations, away from major urban areas, where restrictions and abutters' objections were less restrictive.

Similar findings by Levine & Inam (2001) show that 78% of developers nation-wide view local regulations, including zoning, subdivision regulations, parking standards and street width, are a significant obstacle to the creation of developments with higher densities, mixed use and transit-oriented design. According to Levine & Inam (2001), although developers perceive considerable market interest in such forms of development, and believe there is an inadequate supply of such communities, they also believe local regulation is the primary obstacle in their construction.

Table 4. Effect of local regulations on developers

Effect of local regulations on developers' decisions	Percentage of respondents (<i>n</i> = 85)	Type and typical relief sought by developers in the majority of their applications	Percentage of respondents (<i>n</i> = 83)
Build less dense development than originally desired	72.1	Denser single-family housing	42.4
Build more expensive structure than originally desired	60.6	Lot size decrease	39.7
Build in less populated areas	38.5	Include or change to multi-family housing	31.7

Table 5. Perception of what design characteristics private subdivision fosters

Residential private subdivision characteristic	Percentage of developers (<i>n</i> = 80)	Percentage of planners (<i>n</i> = 145)
Encourages housing clusters	42	49
Permits greater density	25	26
Permits housing types not found elsewhere	37	41
Allows narrower streets	49	61
Allows innovative design	67	57

Public Officials' Attitudes

Public officials acknowledge the particular design benefits associated with private subdivisions. Fifty-seven per cent indicated that in their view such private developments are introducing innovative design in the form of building arrangements and the encouragement of unit clustering. Forty-one per cent felt that such developments permit the introduction of housing types not found in other developments within their communities, and 61% indicated that they allow for narrower street standards to be incorporated. This perception is relatively persistent in the minds of public officials and developers alike (Table 5).

While public officials see the benefit of private developments in pushing the design envelope within the confines of the development itself, many are also concerned about the social implications for, and impacts of these developments on, their surrounding communities, as one respondent writes:

As a matter of policy, gated private communities are discouraged as they are not in keeping with the urban form which calls for an interconnecting network of vehicular and pedestrian movement. In addition, the walling of neighbourhoods from arterial roadways should be avoided by alternatives such as the placement of other compatible uses along the periphery.

Although almost all of the public officials (82.5%) report that their jurisdictions require private developments to follow established subdivision regulations, the enforcement of these standards through the approval process is malleable. In some cases, when such a development is classified as a condominium, which may include attached and/or detached dwelling units, no formal review of street standards is required. In fact, the majority of public officials surveyed (61%) indicated that their jurisdiction allows for narrower streets to be constructed within private developments. As indicated by one of the respondents:

Variances are more easily granted within private road systems since the county will not have any maintenance responsibility or liability. A developer for such a community may obtain waivers to reduce and/or eliminate some design/construction requirements (e.g. tighter radii, unusual landscape islands, sub-base thickness, pavement thickness, etc.). The local jurisdiction is willing to grant some of the requested waivers as the ownership/maintenance responsibility for the improvements will not be the dedicated obligation of the jurisdiction.

The practice of building narrower roadways and offering smaller building

setbacks within private subdivisions has been a widely accepted practice in the last decade. A street standards survey completed in 1995 showed that 84% of the cities polled allowed for different street standards in such developments, and that they more readily accepted the introduction of different paving materials, changes in street configurations and the employment of traffic-calming devices (Ben-Joseph, 1995).

As amplified by the survey, common subdivision regulations often restrict alternative solutions. Developers and public officials see in privatizing subdivision a vehicle for a simplified approval process and the introduction of design innovation.

Such attitudes can also be seen in developers' responses regarding storm water mitigation requirements. The majority consider the system layout and the fees associated with hook-ups as excessive (Table 3). With jurisdictions requiring developers to provide large storm water management systems, and with the regulations for these systems following the outdated and expensive practice of structural conveyance (piping), with wet and dry detention ponds, developers may be realizing the shortcomings of existing requirements. Yet, while narrowing streets, using alternative paving materials to reduce impervious surfaces, and constructing vegetative swales instead of concrete gutters would reduce costs and create favourable ecological conditions, they are not easily approved (US Department of Housing and Urban Development, 2003). As one of the developers remarked, "Regular subdivision codes don't allow flexibility. Lots are too standardized and streets use too much area. If I could build narrow streets and small lots, developments controlled by covenants and HOA [home owners association] will not be necessary."

As the survey shows, the ability to provide design choice and efficient layouts, and the avoidance of a lengthy approval process, drive both sectors to offer CICs rather than typical subdivisions. It is unfortunate that under such circumstances change is likely to happen within the public realm not through traditional means but rather by outliers and renegades. Indeed, it seems that in the last decade most innovation in subdivision design has sprung from within the private domain and under the governance of community associations. The following section describes such cases.

Density, Streets and Nature

One interesting tool for increasing densities has been the introduction of a condominium form of ownership to single-family developments. Although not new, and based on condominium-enabling legislation of the mid-1960s, the application of such a legal structure to a single-family development is more recent. At the Sancerre development in Newport Beach, CA, the developer planned to build and push a single-family residential development to a net density of 9.4 dwelling units per acre. As part of the master-planned Newport Ridge project, the Sancerre site was subject to development parameters established by the Irvine Company; housing on the site was to be geared to a moderate-income market segment. The site itself, which was zoned for planned development, could have satisfied this requirement with townhouses at about 14 units per acre. However, the developer envisioned a stronger market for the site in single-family housing and instead adopted a cluster concept. Under the local

planning regulations, such density modifications could be allowed with the current single-family subdivision ordinance.

By opting for a private subdivision, the developer was able to lay out four- to six-unit clusters around private drives with zero lot lines to maximize the usable open space. Furthermore, the developer determined that the legal framework for condominium ownership would be advantageous. The advantage to the developer was that the project could be developed under multi-family standards, which are geared towards higher-density housing. Standards for street widths, parking ratios and setbacks for multi-family projects are less expansive than for standard single-family projects (Figure 5).

As condominiums, each four- or six-unit cluster could be developed as a single lot, wherein the buyer would get title to the house and to the side and rear yards as defined by the condominium plan. The concept is similar to townhouse ownership, an idea buyers readily understand and accept but which is seldom applied to single-family units (Urban Land Institute (ULI), 1994).

The result is a small-lot, zero-lot-line, courtyard community that pushes the single-family home densities to the limit in order to meet market demand for this type of housing. Dwelling units are approximately 35 feet wide; most units have a 10–15 foot wide yard on one side, which wraps around the unit and flows into a 15 foot wide rear yard. The design flexibility inherent in the cluster layout leaves room for integrating the open land into and around the groupings of structures. This ensures ready access to considerably more open land than would be possible with a conventional pattern.

As seen in the survey, most jurisdictions allow for a different, more flexible and narrower set of standards to be implemented on private streets. A case in point are the developments of Belmont, VA. The Belmont plan originally incorporated a curvilinear loop street system that conformed to the Virginia Department of Transportation's (VDOT's) subdivision street requirements. With Loudon County adopting a neo-traditional neighbourhood design imitative, design features such as narrow lanes, reduced rights-of-way and smaller turning radii were sought by the developer. However, in order to achieve these changes at least 18 variances from the VDOT's subdivision street requirements had to be requested.

After prolonged and unsuccessful negotiations with the VDOT, these requests were withdrawn and, with the cooperation of the county, a private local street system to be maintained by a home-owners association was developed. Only three collector and arterial streets were designed according to the prevailing subdivision standards and accepted into the public street system; the rest of the street system was placed in private hands.

Belmont was the first development approved by the county that incorporates an extensive private street system. Although the original plan was never implemented due to financial difficulties, it subsequently forced the county to adopt its own set of private street standards to be used on future projects (Southworth & Ben-Joseph, 2003). By 2003 two new CICs, Belmont Green and Belmont Forest, were constructed along Belmont's original principles and under the control and maintenance of home owners associations (HOAs).



Figure 5. By opting for condominium ownership the developer of Sancerre in Newport Beach, CA (at centre), was able to increase the density of single-family housing to 9.4 units per acre. Taking advantage of the county's multi-family standards, the development, situated in the midst of other private CICs, shows higher efficiency of land use and provides more affordable single-family housing units.

A similar situation can be found in other localities. The designers for Southern Village, NC, planned on introducing neo-traditional design elements such as reduced lot lines and garages that were accessible through back alleys. However, the town's engineering and subdivision standards conflicted with the dimensions desired by the developer. For example, while Southern Village originally planned its alleys to be 12 feet wide, the standards called for 20 feet of width. Insisting on the 12 feet dimension, the developer and the town compromised by designating the alleyways as privately owned, therefore eliminating the town's obligation for public services such as rubbish collection (ULI, 2000).

The concept of private communities as environmentally sensitive developments may sound to some a contradiction in terms. However, some of these developments provide examples of responsible construction that minimizes environmental impact while maximizing economic value.

Dewees Island and Spring Island, for instance, are private subdivisions on the coast of South Carolina. Both communities have established architectural and environmental design guidelines which state their desire:

...to have as their objective, harmonious integration of the built environment with the island's native environment. To maintain and

enhance the island's integrity, to preserve the ecosystems, and indigenous landscape and to reduce dependence on non renewable resources. (Deweese Island Property Owners Association, 1996, p. 1)

Both of these developments went through several unsuccessful starts. Whether stalled by entitlement obstacles, community opposition and financial difficulties or, as in the case of Spring Island, by community objection to an approved 5500 dwelling units and two golf courses on the island's 3000 acres, both downzoned to lower densities to accommodate environmentally sensitive solutions. Both projects look superior when compared to other developments in the area because the developers not only agreed to protect sensitive natural habitats, but also often exceeded established minimum environmental requirements. Working with environmental groups throughout the development process, the developers established a high performance threshold for the projects, such as in sewage treatment systems and the use of environmentally responsible building materials.

Deweese Island and Spring Island have an extensive private development approval process. They require the engagement of registered architects and landscape architects, site surveys, analysis and site planning reviews by the respective habitat review boards, preliminary design reviews, final designs and construction documents. Furthermore, the architect of each project is required to submit a written evaluation "of the way in which the project is environmentally sustainable" (Deweese Island, 1996, p. 14) (Figure 6).

Spring Island, for example, has a habitat review board that makes recommendations, and reviews and approves architectural and landscape plans in accordance with the habitat review guidelines and the recorded declaration of covenants and restrictions for the island. While the guidelines include elements of typical zoning ordinances such as general setbacks, siting and massing standards, they also address development on a micro scale. For instance, each lot on Spring Island has its own specific property setback lines and building envelope. The acceptable size for a Spring Island home is dictated by the site conditions, such as landform, tree cover, setbacks, views from neighbouring lots and distance from adjoining lot lines. The habitat review guidelines also make recommendations regarding environmentally sensitive design opportunities and stress site responsiveness in grading and earthwork, natural ventilation, massing and design quality.

On Deweese Island every building must meet specific needs in eight basic categories: energy, air quality, water, resource recycling, suitable habitat, communication, transportation and aesthetics. To meet these requirements six sets of standards are required: efficient resource use, minimal toxicity of materials, preservation and restoration of natural systems, quality of community and economic vitality. To minimize habitat disturbance and storm water run-off, impervious landscape surfaces are prohibited and crushed limestone roads serve the island's only allowed mode of motorized transportation—electric vehicles.

The extensive use of pervious surfaces, and the island's closed-loop sewage system, which eliminates all discharge, allow for uncontaminated groundwater replenishment. These environmentally sensitive design features and energy-saving building techniques and materials have resulted in lower power consumption at 75% of the regional average, and household water consumption of about 30% of the regional average (Takesuye, 2002) (Figure 7).

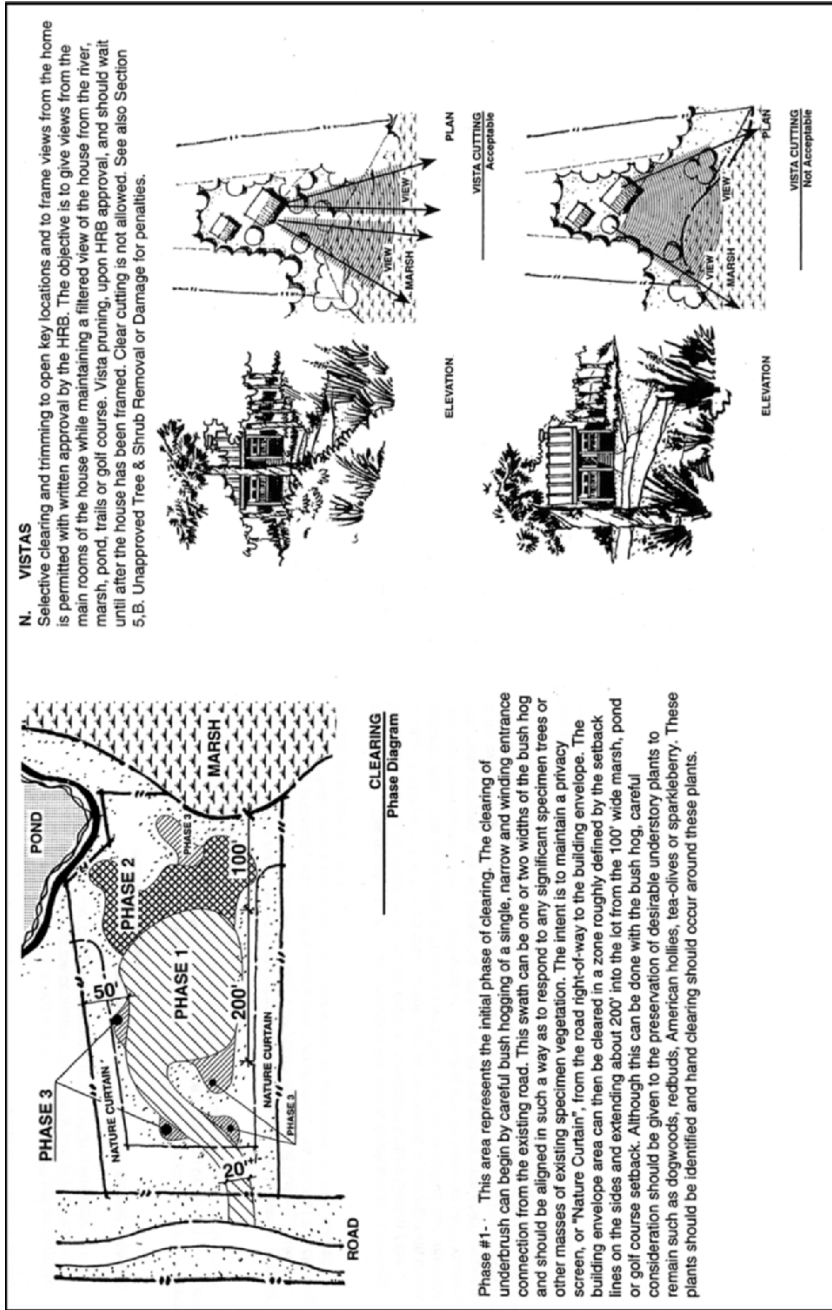


Figure 6. The habitat review guidelines of Spring Island are administered by an architectural and habitat review board. This board scrutinizes all home plans, including siting, landscape and any alteration of natural vegetation. The guidelines ensure each proposed residence conforms to strict environmental standards. Furthermore, buyers are required to spend a day with a local naturalist and attend a two-day seminar on designing with nature before they plan their new home.



Figure 7. There are no impervious surfaces on Dewees Island, allowing full restoration of the underground aquifer. Only vegetation indigenous or native to the South Carolina coastal plains is allowed. This xeriscaping approach removes the need for irrigation, fertilizers and pesticides. Homes are required to use water conservation fixtures, reducing water consumption by 60%.

Although the self-imposed requirements for these developments are much greater than those specified for any typical subdivision, both projects experienced decreased development costs for infrastructure and amenities. Since the existing natural environment was the primary amenity the community was selling, roads were made narrower and built from material previously existing on the properties. Not having to provide paved impervious surfaces enabled the developer to decrease the initial up-front development costs (Rapson, 2002).

Inevitably, the success of these developments is strongly related to the high pricing structure and the narrow market segment these projects have targeted. Both of the developers were able to provide fewer units in their projects as a result of identifying an emerging segment of consumer demand, where the consumer's willingness to pay enabled a low-density, environmentally sensitive development.

Yet, these high-end communities provide a prototype for other, more moderate projects. The Dewees Island approach has gained the attention of Habitat for Humanity and has become a resource for sustainable design techniques and resource-efficient practices (Rapson, 2002). Other core ideas from both Dewees Island and Spring Island are serving as models for other lower-end projects such as the 5000-unit CIC of Palmetto Bluff, Bluffton, SC.

Towards Better Subdivisions

The proliferation of CICs, with their ability to plan, design and govern outside public boundaries, can be seen as an indicator of a failed public system. When developers and public officials resort to privatization in order to achieve a more responsive design outcome, and when local jurisdictions acknowledge that privatized communities provide a straightforward way to grant variations and innovation, then something is wrong with existing parameters of subdivision codes and regulations.

Indeed, as Seidel (1978) and the present study indicate, for the last 25 years the subdivision approval process has increased in its complexity, in the number of agencies involved, in the number of delays and in the addition of new requirements. While in 1976 almost half of the developers surveyed rarely required regulation relief such as variances, in 2002 more than half required such

a process at least half of the time. Most requests for relief in 2002 were for building higher-density single-family areas and more multi-family units, and the creation of varied site plans such as variation in lot sizes. Both developers and public officials acknowledged that the application for variances and changes in subdivision regulations is lengthy and cumbersome. Therefore it is not surprising that developers see private developments governed by home-owners associations not only as responding to market demands and trends, but also as a way to introduce planning and design concepts that are often not allowed or are difficult to get authorized under the typical approval process.

As McKenzie (2003) asserts, and the present survey correlates, CICs are enabling developers to maintain profits and keep the design process relatively open-ended and flexible. The ability to operate outside the regular, common box of subdivision regulation allows the developers to offer various design solutions that fit the local setting, the targeted site and the prospective consumers. In some cases these can be attractive, high-density yet affordable single-family developments such as Sancerre, and in others low-density, high-end yet ecologically sensitive construction as in Dewees Island.

Paradoxically, while CICs are often controlled and managed by strict covenants and regulations, their initial design is very much outside the mainstream regulatory apparatus. It is precisely for this reason that they prove to be more flexible in their design solutions and more agreeable to developers, consumers and local governments. How can such flexibility be integrated in the regular planning process? Can subdivision regulations be made more accommodating and less prescriptive? Will such an approach level the playing field and allow for more housing choices and greater design variety in the public domain? Will such changes promote developers to plan subdivisions endowed with CIC design qualities but without their restrictive covenants and privatized shared spaces? Also, conversely, can CICs, while exhibiting great variation in architecture and site design features, be made less controlling in their management policies?

Obviously there are many issues to tackle by the spread of CICs. However, none is more important than the realization that public policy and subdivision regulations must allow and promote a variety of housing styles and development. Consumers should not be forced into CICs because they are the only type of developments that offer them choice and a range of features. CICs should be seen as a catalyst to change in subdivision standards and regulations and as a vehicle for bridging between public officials and developers, for through the use of CICs not only are developers able to circumvent existing regulations, bring down development costs and in some cases produce quite innovative community design solution, but also jurisdictions are enabled to secure new taxpayers with less public expenditure.

Not all CICs are created equal, and many are far from perfect. However, in terms of design efficiency, the utilization of spaces and the integration of social and environmental amenities they illustrate the shortcomings of many standards applied to typical subdivisions.

Acknowledgments

This study has been supported in part by the Lincoln Institute of Land Policy. The author would like to thank Jeff Rapson and Tell Metzger for their help with

the research as well as Sam Bass Warner, Jr and Mark Schuster for their comments on earlier drafts of this paper. Valuable comments and suggestions were received from the anonymous referees.

Notes

1. According to the authors, that may be partly due to the fact that there is a large Hispanic population in the west and south-west, areas with the largest concentration of gated communities.
2. Private developments were defined as those developments that have private streets and are governed by the home owner association.

References

- Barton, S. & Silverman, C. (Ed.) (1994) *Common Interest Communities: Private Governments and the Public Interest* (Berkeley, CA: Institute of Governmental Studies Press).
- Bemis, A. (1934) Housing and recovery. Is government intervention helpful or harmful?, *Technology Review*, 36(8).
- Ben-Joseph, E. (1995) *Residential Street Standards and Neighborhood Traffic Control: A Survey of Cities' Practices and Public Officials' Attitudes* (Berkeley, CA: Institute of Transportation Studies, University of California at Berkeley).
- Blakely, E. & Snyder, M. G. (1997) *Fortress America* (Washington, DC: Brookings Institution).
- Community Associations Institute (1999) *National Survey of Community Association Homeowner Satisfaction* (Alexandria, VA: Community Associations Institute Research Foundation).
- Coy, M. & Pöhler, M. (2002) Gated communities in Latin American megacities: case studies in Brazil and Argentina, *Environment and Planning B: Planning and Design*, 29(3), pp. 355–370.
- Davis, M. (1990) *City of Quartz* (London: Pimlico).
- Deweese Island Property Owners Association (1996) *Architectural and Environmental Design Guidelines* (SC: Deweese Island).
- Economist (2002) Gated communities shut up, 30 November, p. 49.
- Franzese, P. (2002) Does it take a village? Privatization, patterns of restrictiveness and the demise of community, *Villanova Law Review*, 47, p. 553.
- Garreau, J. (1991) *Edge City: Life on the New Frontier* (New York: Doubleday).
- Glasze, G. & Alkhayyal, A. (2002) Gated housing estates in the Arab world: case studies in Lebanon and Riyadh, Saudi Arabia, *Environment and Planning B: Planning and Design*, 29(3), pp. 321–336.
- Guterson, D. (1992) No place like home: on the manicured streets of a master-planned community, *Harper's Magazine*, November, pp. 55–64.
- Jürgens, J. & Gnad, M. (2002) Gated communities in South Africa—experiences from Johannesburg, *Environment and Planning B: Planning and Design*, 29(3), pp. 337–353.
- Lang, R. & Danielsen, K. (1997) Gated communities in America: walling the world out, *Housing Policy Debate*, 84, pp. 867–899.
- Leisch, H. (2002) Gated communities in Indonesia, *Cities*, 19, pp. 341–350.
- Levine, J. & Inam, A. (2001) Developer–planner interaction in accessible land use development. Paper presented at Conference of the Association of Collegiate Schools of Planning, Cleveland, OH, November.
- Low, S. (2001) The edge and the center: gated communities and the discourse of urban fear, *American Anthropologist*, 103(1), pp. 15–58.
- Marcuse, P. (1997) Walls of fear and walls of support, in: E. Ellin (Ed.) *Architecture of Fear*, pp. 101–114 (New York: Princeton Architectural Press).
- McKenzie, E. (1994) *Privatopia: Homeowner Associations and the Rise of Residential Private Government* (New Haven, CT: Yale University Press).
- McKenzie, E. (1998) Homeowner associations and California politics: an exploratory analysis, *Urban Affairs Review*, 34(1), pp. 52–75.
- McKenzie, E. (2003) Common-interest housing in the communities of tomorrow, *Policy Debate*, 14, pp. 203–234.
- Miao, P. (2003) Deserted streets in a jammed town: the gated community in Chinese cities and its solution, *Journal of Urban Design*, 8, pp. 45–66.
- Nelson, R. (1999) Privatizing the neighborhood: a proposal to replace zoning with private collective property rights to existing neighborhoods, *George Mason Law Review*, 827.

- Nichols, J. C. (1945) What we have learned, Technical Bulletin 1 (Washington, DC: Urban Land Institute).
- Olmsted, F. L., Jr (1916) Basic principles of city planning, in: J. Nolen (Ed.) *City Planning: A Series of Papers Presenting the Essential Elements of a City Plan*, pp. 1–18 (New York: D. Appleton).
- Pérez, P. (2002) Buenos Aires: fragmentation and privatization of the metropolitan city, *Environment and Urbanization*, 14, pp. 145–158.
- Rapson, J. (2002) *Private Wilderness Playgrounds: Understanding the Competitive Effects of Environmentally Oriented Master-planned Communities*. Cambridge, MA: Master of Planning Thesis, Massachusetts Institute of Technology.
- Robins, S. (2002) At the limits of spatial governmentality: a message from the tip of Africa, *Third World Quarterly*, 23, pp. 665–689.
- Sanchez, T. & Lang, R. (2002) Security versus status: the two worlds of gated communities, Metropolitan Institute at Virginia Tech Census Note 02:02.
- Seidel, S. (1978) *Housing Costs and Government Regulations: Confronting the Regulatory Maze* (New Brunswick, NJ: Center for Urban Policy Research, Rutgers, the State University of New Jersey).
- Southworth, M. and Ben-Joseph, E. (2003) *Streets and the Shaping of Towns and Cities* (Washington, DC: Island Press).
- Stabile, D. (2000) *Community Associations: The Emergence and Acceptance of a Quiet Innovation in Housing* (Westport, CT: Greenwood Press).
- Stark, A. (1998) America, the gated?, *Wilson Quarterly*, 22, pp. 58–79.
- Takesuye, D. (2002) Dewees Island: a pioneering example, *Urban Land*, 28–29 May (Washington, DC: Urban Land Institute).
- Treese, C. (1999) *Community Association Factbook* (Alexandria, VA: Community Associations Institute).
- ULI (1994) *Project Reference File*, 24, 15.
- ULI (2000) *Project Reference File*, 30, 20.
- US Department of Housing and Urban Development (2003) *The Practice of Low Impact Development* (Washington, DC: Office of Policy Development and Research).
- Van der Ryn, S. & Cowan, S. (1996) *Ecological Design* (Washington, DC: Island Press).

Appendix: Selection and Sampling

Selection was based on MCD building permits data, 1996–2000. For the purpose of the study only single-family building permits were used since they best represent subdivision requirements. It is important to note that not all areas of the country require a building or zoning permit. The census statistics, therefore, only represent those areas that do require a permit. The MCD data were collected according to four regions: north-east, mid-west, south and west. Figure A1 shows the standard distribution of the states within these regions.

Jurisdiction Selection

The primary factor in selecting the jurisdiction samples was the number of building permits issued for single-family housing. The author's assumption was that jurisdictions that are issuing extensive

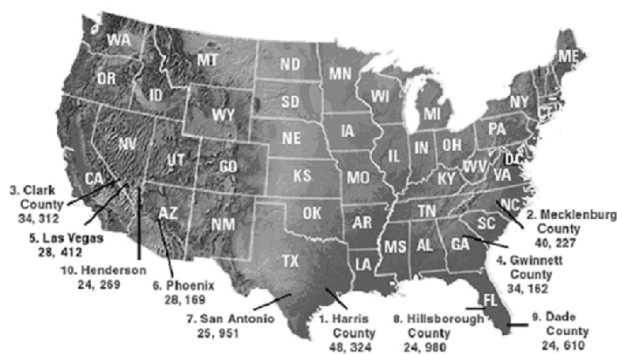


Figure A1. Single home building permits issued 1996–2000: top 10 jurisdictions in the country.

Source: US Census.

building permits are the ones that deal the most with new subdivision construction and therefore face some of the greatest challenges posed by their regulations. He also assumed that these data would give him a reasonable indication of where most suburban growth is occurring (Figure A1).

Steps used:

- US Census data from 1996 to 2000 were analysed;
- US Census Metropolitan Statistical Areas (MSAs) and Consolidated Metropolitan Statistical Areas (CMSAs) in the census's four geographical regions (mid-west, north-east, west and south) were analysed for the annual number of single-family building permits issued;
- the total number of permits issued for each jurisdiction in the five-year period was tallied;
- the top 125 jurisdictions in each region were selected;
- a mail survey was sent in June 2002 to each jurisdiction asking the official responsible for administrating subdivision regulations to reply.

Selection of Developers

Two databases were used in selecting the developers sample. A list obtained from the ULI provided the majority of the sample. This list was compared to data provided by *Builder* magazine, which lists each year the largest development corporations in the USA. The magazine's information was tallied for the years 1996–2000 for a master list of the 288 largest development corporations. This list was incorporated with the general list provided by the ULI. Although many of these corporations tend to develop nation-wide, the assumption was made that their viewpoint should be included.

Steps used:

- developers data was matched with the top jurisdictions for each geographical region as developed in phase 1;
- 125 developers for each region were randomly selected, making sure that at least 25 of those were from the *Builder* magazine list;
- a mail survey was sent in July 2002 to each developer.

Survey Distribution

(1) Public officials:

- 500 questionnaires mailed (125 for each region); total received = 159;
- received per region: mid-west 30%, south 27%, north-east 22%, west 21%;
- response rate total = 31.8%.

(2) Developers:

- 500 questionnaires mailed (125 for each region); total received = 86;
- received per region: mid-west 25%, south 28%, north-east 23%, west 24%;
- response rate = 17.2%.

