NeighborWorks® AMERICA

Patching the Fabric of the Neighborhood: The Practical Challenges of Infill Housing Development for CDCs

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Fellowship Program for Emerging Leaders in Community and Economic Development

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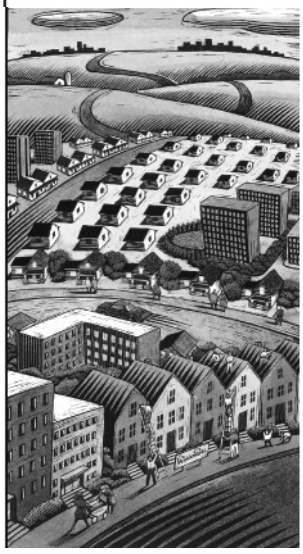

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Abstract

This study describes the potential and limits of infill affordable housing development in the community development context, with the aim of serving as a resource for practitioners in framing and evaluating infill development opportunities. At the policy level, there is a general preference for infill affordable housing development due to the fact that infill not only delivers new housing stock but also is perceived to deliver a multitude of positive social and economic externalities, such as neighborhood revitalization, neighborhood reinvestment, slower suburban expansion, and the re-creation of walkable, transit-oriented communities. Among community development practitioners, however, infill development's operational challenges, in particular cost and complexity factors, are well known, such that its potential is often limited by a host of contingencies. This study evaluates how internal factors (organizational mission and internal capacity) and external factors (real estate market context, community context, and municipal context) shape the infill development strategies and decisions of community development corporations (CDCs).

This study finds that while the dominant practice among CDCs remains single-home, scattered-site infill affordable housing production, CDCs practice infill development on varying scales and volumes, to achieve a variety of diverse objectives. We find significant differences in the approaches and objectives of infill development at either extreme of the real estate market spectrum. We also find that municipal context can be the key determinant of infill affordable housing development feasibility. Finally, we find that in spite of the difficulties and negative perceptions that surround infill development, it remains a widely popular community development strategy because it is perceived to address the primary organizational mission of a majority of community development corporations: community revitalization.

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1.0 Executive Summary

Infill housing development — new residential development on vacant, abandoned and underutilized property within built-up areas of existing communities — is one of the most common housing strategies deployed by CDCs in the United States. Over the past decade, much has been written about the potential of infill development to meet the objectives of a variety of policy initiatives. Among urban revitalization proponents, low-income housing advocates and Smart Growth activists, infill development is cited as a means of delivering an array of desirable outcomes: revitalized downtowns and close-in neighborhoods, increased affordable housing stock, increased tax revenues, neighborhood reinvestment, diminished crime rates, slower suburban expansion, community empowerment, decreased traffic congestion, preservation of green space, and the creation of walkable, transit-oriented communities. Evidence from community development practitioners, however, suggests that in spite of its popularity, affordable housing development on infill sites is often perceived as relatively expensive, time-consuming, risky, and, in many cases, becomes a magnet for community opposition.

The aim of this study is to articulate the relevance and limitations of infill housing development in the community development context. Specifically, we discuss the unique features of infill development relative to other types of real estate development. Then we examine how internal capacity, organizational mission, market context, community context, and municipal constituency shape CDC infill development in practice. This research draws on existing literature on infill development, insights from community development practitioners, discussions with leading policy makers, and survey responses from NeighborWorks® America community development affiliates.

Finding #1: Among community development practitioners, there is a gap between perception and practice of infill development.
While a majority of community development practitioners define infill development as single-family, scattered-site, affordable housing production, in reality there is wide variation in the scale, density and perceived objectives of infill development. Most often infill development is perceived as a means to community revitalization. Indeed, among urban, place-based CDCs, whose mission and legitimacy are closely tied to delivering services within a specific geography, infill development using detached, single-family homes is perceived as the primary vehicle for revitalization. While the number of housing units may be low and the per-unit costs relatively high, infill development is perceived to be an effective means of spurring reinvestment, engendering community pride in a neighborhood, promoting public safety, and/or breaking the cycle of physical and economic neighborhood decline.

On the other hand, some CDCs and nonprofit affordable housing producers, particularly those in hot real estate markets, view infill development as their only housing choice, because infill sites are all that remain in their metropolitan areas. Their objective is to preserve affordability and combat displacement of long-time residents. Therefore they practice dense, high-volume infill in order to minimize per-unit development costs and to maximize the developer fees that will subsidize future projects. The implication of this point

for practitioners is that meaningful discussion of infill housing development begins with the clarification of development objectives, housing typology and scale of development.

Finding #2: Infill development's bad reputation in the community development industry can be attributed to inefficient, small-scale, low-density infill housing production.
This study found that a majority of community development practitioners perceived CDC-led infill development negatively, as costly and overly complex. When pressed, these practitioners explained that their negative perceptions stemmed from their experiences with low-density, low-volume infill production, which many agreed was relatively costly and inefficient from a management perspective. This information is significant because the close association between infill and inefficiency and expense precludes productive discussion of the various approaches to and positive outcomes of infill development.

Finding #3: Real estate context matters: community development practitioners in hot and cold markets face different challenges and may consider different strategies.
We found that in hot market cities, where low-income housing shortages are chronic, a common CDC objective is to preserve housing affordability by increasing low-income housing quantity and quality. The practical challenge in these cities is to enable low- and moderate-income residents to live (or continue to live) within the bounds of a neighborhood that is threatened by gentrification or displacement. CDCs in these markets face high acquisition costs and competition for infill sites from private developers. In response, some CDCs have ceased housing production due to financial feasibility constraints; others have partnered with intermediaries, private developers or their municipal governments in order to access capital and sites, reduce costs, or speed the development process; and some are gradually doing less urban-center infill and more urban-periphery production or greenfield development. Finally, some organizations with high internal capacity now focus on large-scale housing development to the exclusion of scattered-site development, which gains efficiencies of scale, reduces cost per unit, and thus preserves affordability.

In cold market cities, with no significant new population growth, large abandoned housing stocks, and high vacancy rates, the objective of infill housing development is to create value. The practical challenge for CDCs and their municipal partners is to attract residents, particularly moderate- and higher-income residents, back to the city or the neighborhood. CDCs in these markets practice scattered-site infill development but do so strategically, deploying "focused infill" strategies that develop sites to act as anchors of reinvestment in order to discourage further decline of neighborhoods-at-risk. In heavily disinvested areas, where abandoned properties may outnumber occupied homes, their challenge is to bring about long-term transformation. CDCs in the hardest-hit markets may no longer practice infill development; instead, they may act as land banks, assembling and maintaining property while waiting for market conditions to rebound. Others deploy strategies that link large-scale infill investments to existing community assets (schools, parks, transit hubs) and larger city initiatives, with the goal of re-creating communities with superior amenities that will re-capture residents who have decamped to suburbs.

Finding #4: Municipal context can make a big difference in infill feasibility and advisability.

This study found that CDCs reported increasingly challenging infill development environments at both extremes of the real estate market. In hot markets, the gap between development cost and affordable rent or mortgage is widening and requires increasingly large amounts of public subsidizing, in the form of discounted land, increased allowances for density, low- or no-interest loans and/or property tax abatements. Without these subsidies, infill affordable housing development projects in hot markets may never yield reasonable developer fees and thus cannot be pursued. Similarly, in weak markets, where infill development is primarily a community revitalization strategy, infill development is most successful when coupled with a comprehensive, city-led revitalization plan that addresses a community's economic development and its education, safety, transportation and housing needs. Put another way, in the absence of comprehensive community initiatives, the effect of a stand-alone infill development on community revitalization diminishes.

There are several implications of this finding for practitioners. First, infill practitioners need to assess and engage municipalities early and often in the planning process. Second, practitioners should be able to acknowledge the possibility that given the current municipal context, infill development may not be in the best interests of the community development corporation or the community that it serves.

Finding #5: Scale matters.

Not surprisingly, this study found that low-scale, low-volume infill housing development is staff-intensive (greater per-unit overhead cost) and costly (greater per-unit development cost) when compared to higher-scale, higher-volume infill housing development. In the context of decreasing subsidies for development as well as the push for CDC sustainability, developers of "traditional" scattered-site, single-family infill development might ask whether there are other means to achieving their objectives. For example, would increasing the scale or volume of housing development be feasible? Is another entity able to develop the site? Would it be advisable to enlist a private sector or nonprofit partner to develop the site? Would introducing a new typology, such as mixed-use development, yield the desired outcomes as well as generate reasonable developer fees? Questions such as these are intended to encourage practitioners to consider efficiency in resource and staff allocation when making infill development decisions.

2.0 Definitions of Key Terms

A number of key terms are used to describe the landscape of infill housing development. The most important of these terms, **infill**, has been defined in the literature in various ways:

> **Urban infill** is the practice of developing vacant or underutilized properties within an urban area rather than undeveloped land in more rural areas (green-fields); infill helps prevent sprawl and can aid in economic revitalization. (U.S. Environmental Protection Agency 1999)

> **Infill** is the development of vacant or remnant lands passed over by previous development in urban areas. (Oregon Transportation and Growth Management Program 1999)

> [**Infill** refers to] new development on vacant lots within urbanized areas, redevelopment of underused buildings and sites, and the rehabilitation of historic buildings for new uses. (Northeast-Midwest Institute and Congress for the New Urbanism 2001)

> **Infill construction** is defined as construction in tracts with densities of at least 2500 persons per square mile as of the 1980 US Census. (Joint Center for Housing Studies, Harvard University 2005)

> [**Infill sites** are] vacant or potentially redevelopable parcels located within existing neighborhoods. (Institute of Urban and Regional Development, University of California, Berkeley 2005)

> **Infill development** involves developing vacant parcels within existing urbanized areas that for various reasons have been passed over in the normal course of development. (Denver Regional Council of Governments 2006)

> "An **infill lot** is one that was developed in years past, say 25 years ago. The home is now out of date, in poor repair, or has been demolished by the city after a fire; the water and sewer hookups are there but fees haven't been paid in years; and maybe there's a remnant of the driveway visible under the weeds in the front yard. It's a property ripe for a new single family home or maybe even a duplex." (Affordable housing practitioner, Texas, 2006)

For the purposes of this study, we define infill housing development to mean **new residential development on vacant, abandoned, and underutilized property within built-up areas of existing communities, where infrastructure is already in place** (Figure 1). Infill development differs from adaptive re-use and rehabilitation of existing structures in that it requires demolition of existing structures followed by new construction.

Figure 1: Potential Infill Development Sites Are Vacant, Abandoned or Underutilized Properties

Vacant lots often become dumping grounds for waste, posing health and safety hazards. In strong markets, infill development typically begins with vacant lots, then proceeds to abandoned properties, and finally, underutilized sites.

Abandoned properties, such as this foreclosed home, cost cities millions in forgone property tax revenues and in demolition and maintenance costs. More significantly, abandoned properties have been shown to decrease the property values of surrounding homes.

Underutilized sites refer to properties with existing structures that may or may not be occupied, where the land residual value exceeds the appraised value of the structure. Unproductive or vacant strip malls with surface parking lots ("greyfields") are becoming increasingly popular sites for higher-density, mixed-use infill development. However, demolition and/or remediation costs for these sites can be significant.

Infill sites often remain undeveloped in a city because developers perceive them as less profitable or carrying higher risk than comparable sites because of economic, environmental, financial or political issues related to the parcels (Steinacker 2001). Common economic problems associated with infill sites are size (small sites are common), shape (irregularly shaped parcels are common), limited ability to assemble larger sites, and/or zoning (limited permissible uses). All these factors constrain a developer's ability to reach efficiencies of scale and financial feasibility. Environmental issues associated with infill sites include contamination on former industrial sites or even former retail sites (gas stations, dry cleaners, oil change services), and asbestos or lead paint contamination in abandoned buildings. Site-specific environmental issues not only add costs to development but also introduce legal liability issues that must be addressed during the due diligence process. Infill poses particular challenges to financing development: traditional financing sources tend to be wary of what appears to be a more complex process, and may not have the tools to evaluate financial risk from development externalities. Finally, infill development can be politically controversial, provoking charges of gentrification if development is perceived as displacing current low-income residents, health and safety risks if a parcel that has posed health hazards is now an affordable housing site, or NIMBY ("Not in My Back Yard") issues if the new development is perceived as "out of character" relative to existing neighborhood structures.

Infill density can vary by housing typology. In fact, this study found considerable variation in the working definition of infill among community development practitioners. For some practitioners, infill refers to single-family, detached housing built for homeownership; for others, infill can mean higher-density, attached or multifamily housing (see Appendix Figure A). Furthermore, in spite of the widely held perception that infill is an urban phenomenon, we found that infill development has been a strategy deployed by CDCs operating in census tracts designated as "rural" as well. The common denominator among these competing

definitions of infill appears to be the condition of the property: an infill site is simply a site closely bounded by existing structures in an existing community.

Greenfield development refers to new residential, commercial or industrial development through subdivision of previously undeveloped land that is not bounded by existing communities.

Brownfield development is the redevelopment of an abandoned, idled or underused industrial or commercial site where environmental contamination may exist (EPA 1999).

Community development corporations (CDCs) are nonprofit, community-based organizations created to renew and improve the economic and social opportunities in a specific neighborhood, population or community. A CDC's legitimacy rests on its ability to deliver value to constituents and nurture relationships with constituents/members and other local organizations. A majority of CDCs engage in affordable housing production, although production scale can vary considerably by organization. CDCs finance affordable housing production by tapping federal, state, and city resources. Other major lines of business typical of a CDC include economic development (e.g., small business lending) and community-building activities (e.g., community organizing, homeownership counseling, and skills/job training and placement).

Under the general umbrella of CDCs are: **community-based development organizations** (CBDOs), **community housing development organizations** (CHODOs), **community development real estate institutions** (CDREIs) , and **NeighborWorks® organizations**, which include both **neighborhood housing services** (NHSs) and **mutual housing associations** (MHAs).

Distinct from a CDC is a **nonprofit affordable housing developer,** whose market area typically extends beyond an individual neighborhood and whose focus is primarily on high-volume affordable housing production. Bridge Housing of San Francisco, Denver-based Mercy Housing, Greater Miami Neighborhoods, and Action Housing of Pittsburgh are examples of these mission-oriented organizations which produce, own and/or manage affordable housing on a significant scale, often on urban infill sites.

A CDC is distinguished from a **for-profit housing developer** by the fact that it operates in a **double bottom line** environment, in which fulfillment of a philanthropic mission (i.e., the provision of affordable housing, economic development and community building) is as important as the financial performance and sustainability of the organization. This is not to say, however, that for-profit, mission-oriented affordable housing developers do not exist.

Intermediaries refer to organizations that link CDCs with local networks of banks, corporations, foundations, and municipal or state governments. The aim of this linkage is to leverage outside resources to assist CDCs in accomplishing their mission. Together, these networks form the **community development system** of a city (see Appendix B). Since the 1980s, intermediary organizations have emerged as facilitators and aggregators of ideas, information, technical assistance and funding among municipalities, city-level networks of

CDCs, and CDCs themselves. NeighborWorks® America, Enterprise Community Partners, the Local Initiatives Support Corporation (LISC), the Housing Assistance Council, and the Rural Community Assistance Council are considered national intermediaries.

This study also employs the real estate hot market/cold market dichotomy (also referred to as strong market/weak market) to clarify infill development. A **growing** or **hot market city** refers to a real estate context in which the average home price has increased at a rate significantly greater than the rate of household income. A **slow-growth, cold,** or **weak market city** refers to a real estate market in which the average home price is unchanging or growing slowly relative to the national average. Appendix C further describes these market contexts.

3.0 Research Methodology

3.1 Research Goal

The aim of this study is to articulate the potential and limits of infill housing development in the community development corporation context. More specifically, this research focuses on those factors that influence a CDC's decision to develop infill housing in a community. We are interested in this question because very small-scale, low-density infill development is widely popular among CDCs across the nation, in spite of the known risks, inefficiencies and challenges associated with this type of development. Small-scale, low-density infill development presents financial and operational complexities and contingencies that are arguably greater than those for higher-scale, higher-volume development, thus exposing nonprofit CDCs to significant financial risk and internal stress that can threaten the viability of other programs and lines of business. This begs the question: why are so many CDCs engaged in small-scale infill development in spite of its challenges?

We hypothesize that many of these CDCs are attracted to housing development, and to infill in particular, because infill housing development delivers many benefits to the community, to constituents, and to the organization. Some CDCs believe that scattered-site development is their only option for housing development given the neighborhood-centered nature of their organization.

Drawing on the experience of community development organizations that have become very adept infill housing developers, as well as those that have tried and then discontinued infill development, this study seeks to discern how these organizations assess infill opportunities. Specifically, we discuss how internal factors, such as internal capacity and mission, as well as external factors, such as real estate market, community and municipal context, shape CDC practice of infill development.

3.2 Research Approach

This research draws on three sources: (1) existing literature on infill development, (2) interviews with community development practitioners and policy makers, and (3) survey responses from NeighborWorks® America community development affiliates (Appendix F). As shown in Figure 2, although we employ a survey, our techniques are primarily qualitative rather than emphasizing quantitative methods or real estate financial analysis.

Figure 2: Research Methodology

Interviews	Interviewed 27 individuals, including community practitioners (11), intermediaries (10), and policy researchers, academics, and consultants (6). Conducted infill focus group comprised of nine (9) CDC executive directors, all of whom belong to the NeighborWorks® America network.
Electronic survey	Sent 12-item electronic survey to 236 NeighborWorks® America organization executive directors; 98 organizations responded (42% response rate). Of those who responded, forty (40) self-identified at the end of the survey. Among those who self-identified, nine (9) attended a focus group held in Washington, DC, and seven (7) were interviewed via phone. Survey questions and aggregate responses appear in Appendix F. *(con't.)*

Public meetings	• Briefed leading affordable housing experts in Washington, DC, on August 14, 2006. • Briefed community development practitioners at NeighborWorks® Training Institute in Washington, DC, on August 15, 2006.
Literature review	Cited a variety of sources on infill development themes: affordable housing, community development, urban revitalization, smart growth and growth policy, vacancy/abandoned/foreclosure issues.

3.3 Limitations

This research relies primarily on the perspectives and experience of NeighborWorks® America member organizations and management consultants. This fact is relevant given the unique characteristics of NeighborWorks® organizations relative to the larger universe of CDCs nationwide (Appendix D). Notably, NeighborWorks® organizations resemble other CDCs in that they are nonprofit, community-based organizations that focus primarily on community revitalization, affordable housing production, and community organizing. However, NeighborWorks® organizations also have access to significant resources that non-network CDCs do not: special grants, technical assistance, training and other resources which are provided to them by federally funded NeighborWorks® America. Specifically, they have access to NeighborWorks® programs such as the Rural Initiative, the Multifamily Initiative, the Community Building and Organizing Initiative, and the Campaign for Home Ownership. While we acknowledge that the experience of NeighborWorks® organizations may not be representative of the community development field overall, we have made every effort to ensure that the findings and conclusions of this study are relevant to community development practitioners nationwide.

4.0 Background

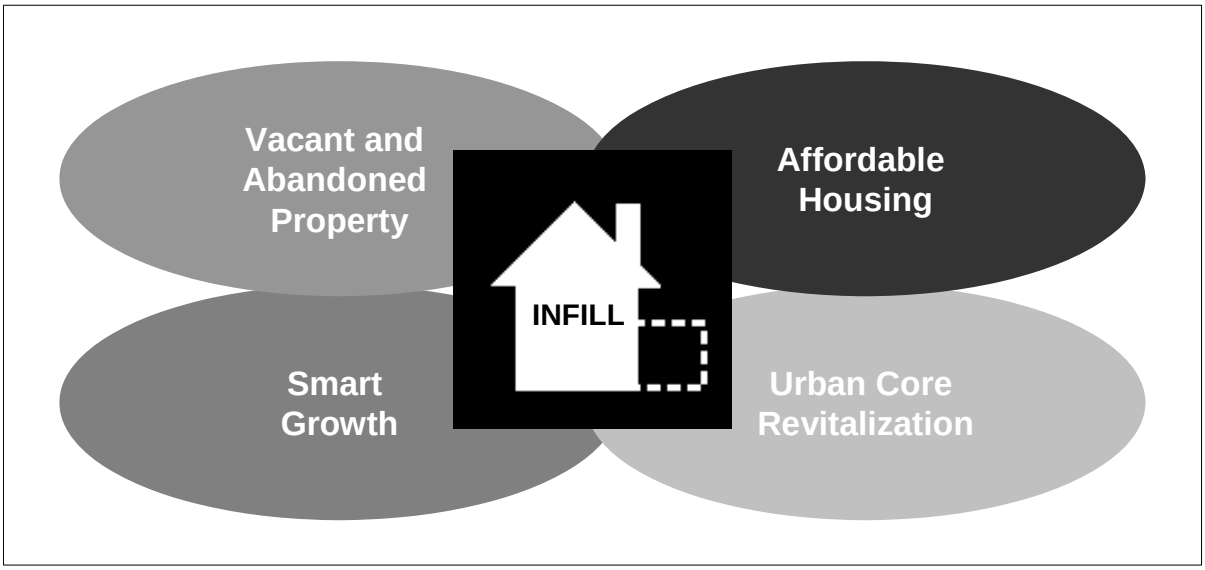
4.1 The Relevance of Infill Housing Development

Infill housing development is a planning concept that has relevance to a variety of policy debates because of its potential to achieve multiple objectives for multiple stakeholders simultaneously: community revitalization, affordable housing, compact development, increased tax revenues, neighborhood reinvestment, low crime rates, slower suburban expansion, community empowerment, green space preservation, and the creation of walkable, transit-oriented communities.

Because of its broad appeal, infill development has become a popular topic in urban planning, housing, transportation, and real estate literature in recent years. Much of the literature since the late 1990s has focused on challenging the perception among for-profit developers and municipalities that the costs of infill outweigh the benefits (ULI 2001, Northeast-Midwest Institute 2001, ULI 2005) or outlining how municipalities can adapt zoning ordinances to promote infill development (MRSC of Washington 1997, Oregon Department of Transportation 1999, EPA 1999a, Allan 2001, Denver Regional Council of Governments 2006).

Infill housing development is also cited as a desirable outcome in the debates over urban core redevelopment, smart growth, affordable housing, and vacant or abandoned property. As depicted in Figure 3, these policy areas overlap; and as we explain below, proponents in each of these areas view infill as a means to fulfilling larger policy goals rather than as an end in itself.

Figure 3: Interest in Infill Housing Development Spans Major Policy Areas



4.1.1 Urban Revitalization through Infill Development

From an **urban core redevelopment or revitalization perspective,** infill housing development represents reinvestment in those urban neighborhoods that tended to suffer disinvestment as cities expanded to the suburbs in the past half-century. When infill housing development is deployed as part of a comprehensive redevelopment or neighborhood plan, cities can experience benefits such as improvement in the overall quality of housing stock, in-migration of new residents, additional jobs and revenue, and, ultimately, revival of city centers and close-in neighborhoods.

Most important, however, is the link between CDC-led infill development and rising property values, "the single best measure of neighborhood improvement.". Econometric analyses have shown that CDC investment in affordable housing and commercial retail facilities can result in property value increases as much as 69% higher than they would have been in the absence of the investment (Urban Institute 2005).

4.1.2 Affordable Housing Production on Infill Sites

From an **affordable housing perspective,** infill housing development is one of a number of strategies being deployed to address the nation's ever-growing need for affordable housing. In the period from 2001 to 2004, the number of households spending more than half their income on housing increased by 14% to 15.8 million (Joint Center for Housing Studies 2006). In strong or hot real estate markets, record home price-appreciation since 2000, steadily rising interest rates since 2003, and slow growth in wages for households in the bottom three income quartiles have led to widespread affordability problems. Furthermore, land use restrictions and anti-sprawl policies have made it even more difficult and expensive to build affordable housing in many metropolitan areas. "It is now impossible to build housing at prices anywhere near what low-income households can afford without subsidies" (Joint Center for Housing Studies 2006).

Affordable housing development on infill sites is an increasingly popular practice. In fact, it may be the only option for CDCs whose legitimacy and mission are closely tied to revitalizing a specific neighborhood. However, nonprofit affordable housing developers, whose mission is primarily to increase affordable housing stock in a region, may need to deploy higher-volume infill development strategies. The question facing these affordable housing developers in some large urban areas is not whether to build on an infill or greenfield site, but, rather, whether to build on a "close-in infill site" (0 to 5 miles from the city center), an "inner-ring suburban site" (5 to 10 miles from city center), or an "outer-ring suburban infill site" (10 to 15 miles from the city center). Because regional nonprofit affordable housing developers typically strive to do larger-scale production, their search is regionwide for parcels of significant size and allowable density, both of which are primary determinants of the financial feasibility of developments.

Building affordable housing on infill sites is desirable for a number of reasons. Strategic development of affordable homes on infill sites, amid mixed-income communities, schools, parks and other community assets, adds to neighborhood stability and thus supports property-value appreciation. By building affordable homes in mixed-use neighborhoods or proximate

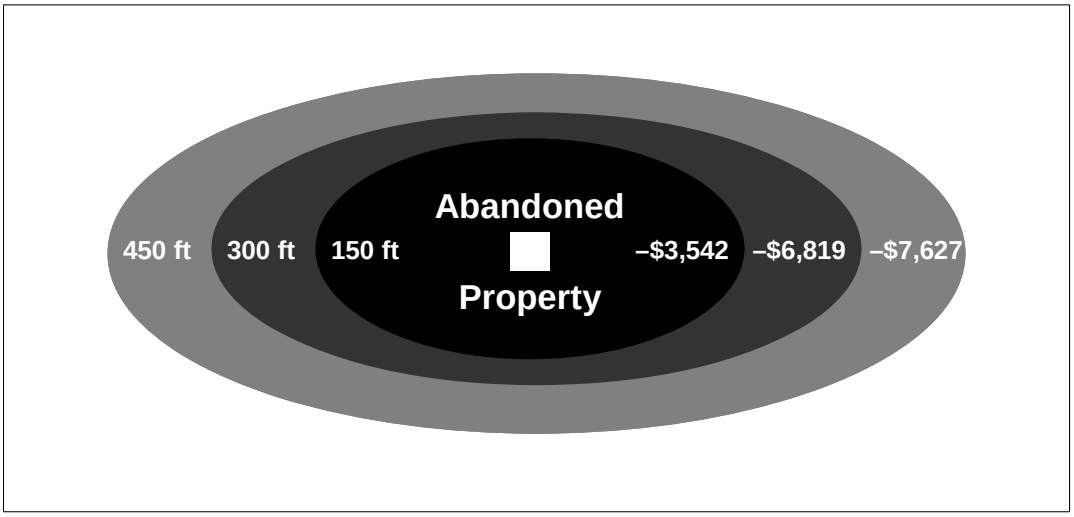
to transportation hubs or commercial centers, developers can address economic development needs (i.e., employment) of low-income families while also meeting their housing needs. Affordable housing production on infill sites is also seen as a means of mitigating the effects that displacement, or gentrification, has on long-time residents of historically low-income neighborhoods in hot real estate markets.

4.1.3 Addressing Vacancy and Abandonment through Infill Initiatives

Infill housing development is also one means of combating the many problems associated with **vacant land and abandoned properties.** While some may argue that the problem of vacant and abandoned property is simply a symptom of central city decline, the magnitude of the problem in many major cities suggests that it is now "a problem in its own right" (Accordino and Johnson 2000). "The most common reason a property is abandoned is that the cost of maintenance and operation exceeds the apparent value of the property" (National Vacant Properties Campaign 2005).

Vacant and abandoned properties are costly to cities and their residents for several reasons: if not maintained, vacant lots often become dumping grounds for waste, posing health and safety hazards; abandoned buildings become venues for crime; vacant properties cost cities millions in foregone property tax revenues and in maintenance or demolition costs; and abandoned homes can decrease adjacent property values by thousands of dollars, as shown in Figure 4.[1]

Figure 4: The Concentric Depreciation Effects of Abandoned Property on Neighborhood Property Value in Philadelphia



Source: Temple University Center for Public Policy, "Blight Free Philadelphia: A Public-Private Strategy to Create and Enhance Neighborhood Value," 2001.

[1] Immergluck and Smith (2005) measured the impact of foreclosures on nearby property values in low- and moderate-income census tracts in Chicago in 1997 to 1999, and found that for every foreclosed single-family home, values within an eighth mile radius declined by 1.44 %, or roughly $1,600 per home, assuming an average selling price of $112,000.

Brownfield sites and Temporarily Obsolete Abandoned Derelict Sites (TOADS) can have similar effects on the surrounding neighborhood by "giving the impression to businesses and residents that the local environment is dangerous, and by not being secured so that illegal activities (e.g., dumping, illegal drug sales, and other dangerous activities) occur on the site and in other ways stigmatize the neighborhood so that no one wants to invest in it and those who live or work in it want to leave it" (Greenberg et al. 2000).

In communities with high rates of vacancy or foreclosure, infill development can provide an anchor for reinvestment when coupled with foreclosure prevention, accelerated disposition of foreclosed properties, building rehabilitation, code enforcement, and other initiatives. However, many practitioners assert that breaking the costly spiral of blight and stemming the physical or economic decline of a neighborhood is not simply a question of building new homes or enforcing codes. Housing reinvestment must be part of larger, comprehensive, local government-led efforts that address issues important to neighborhood residents, such as public safety and education.

4.1.4 Infill as a Means to Stemming Sprawl

From a **growth planning** or **smart growth perspective,** infill housing is a means of combating the sprawling low-density developments that typify the growth of so many metropolitan areas in the United States. Municipalities target sprawl in recognition of the full cost and impact of horizontal, suburban and exurban greenfield development on the region's transportation and municipal infrastructure. Since the 1970s, hundreds of studies have concluded that "it costs considerably less to provide linear services (sewer, water, streets) to a compact, efficient development pattern than to a sprawling pattern" (Oregon Department of Transportation 1999).

A study conducted for the EPA (1999b) concluded that infill "can produce non-trivial transportation, environmental and public infrastructure cost benefits." Specifically, the study found that residents of infill developments on the average spent less time and money on the road, thus impacting traffic congestion and air emissions less than their counterparts in suburban developments.

In response to the costs of sprawl, some metropolitan areas have adopted "growth policies" or "compact development principles" that encourage higher density, walkable, transit-oriented infill development in town and city centers. It should be noted, however, that growth policies aimed at reducing regional sprawl that do not explicitly address production of additional affordable housing run the risk of displacing low-income residents.

> "In most regions, smart growth advocates do not strongly promote affordable housing in localities where they want to pass land-limiting policies. Thus, they are often making housing less affordable to those who need it most." (Downs 2003)

In addition, from a land-use and revenue perspective, municipalities have a vested interest in the nature of infill development. Local elected officials and municipalities see infill as a way to expand their tax base. Specifically, municipalities seek to balance the proportion of net revenue-producing properties (e.g., commercial properties) with the proportion of properties

that are net consumers of city services and the city budget (e.g., residential properties). Local governments may seek to increase revenues by increasing the proportion of acreage that is zoned commercial or industrial relative to the acreage zoned residential. This is known as **fiscal zoning**. While fiscal zoning or "fiscalization of land use" may seem at cross purposes with affordable housing development, particularly in cities where vacant land is scarce and expensive, in cash-strapped or revenue-constrained cities, local governments must balance revenues and expenditures.

4.2 Estimating Infill Potential

Estimating potential infill housing capacity is important at both the city and neighborhood level. Knowledge of a neighborhood's infill development capacity can inform the neighborhood planning process and assist CDCs in making strategic decisions regarding real estate acquisition and development.

The potential of infill development can be seen as a function of the supply and capacity of all "buildable land" within a specific geography. Buildable land is defined as vacant, partially utilized, and underutilized properties. Estimating the supply of buildable land within an urban area involves creating a database of parcel-level information, using geographic information system (GIS) software.[2] Estimating development capacity requires analysis of parcel-level zoning to understand permissible uses and densities. For example, when the aim is to estimate the housing potential of an area, one would first need to identify which parcels were zoned residential, and then identify the density (e.g., number of dwelling units per acre) that is permissible on the sites. While straightforward in theory, the process is database-intensive and requires specialized planning skills when attempting to estimate infill capacity in larger geographies (Moudon 2001).

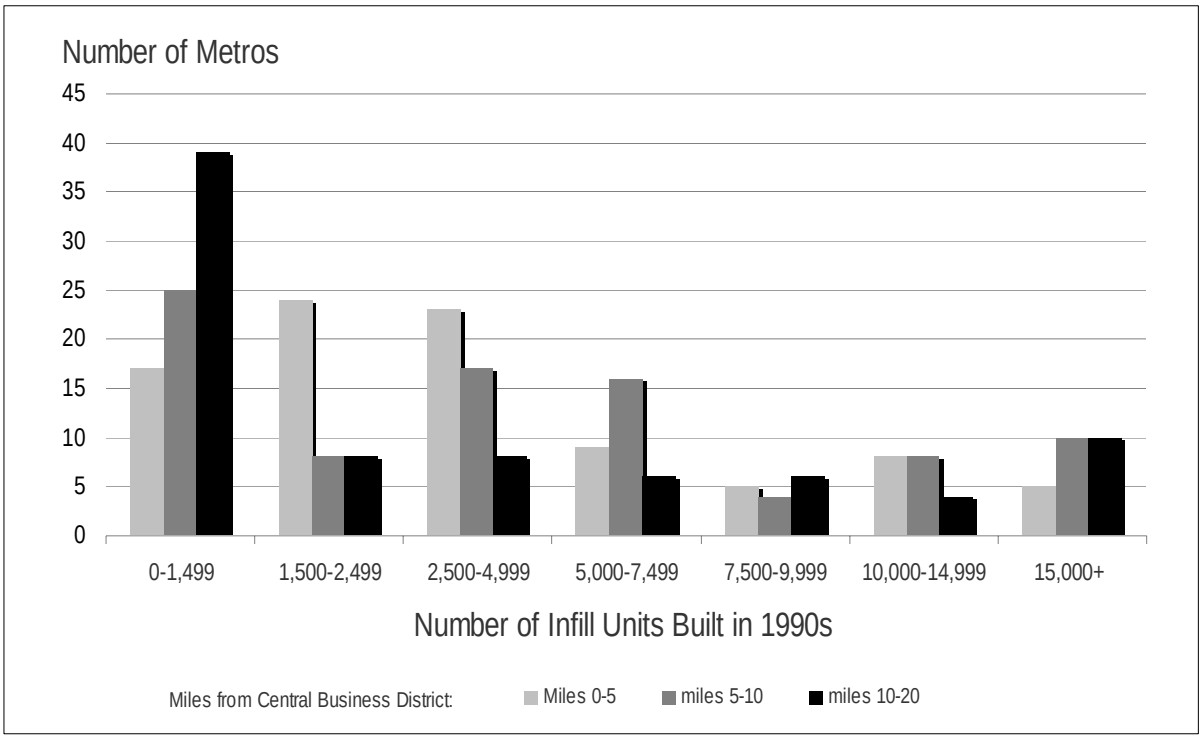
While this study found no national estimate of infill development, various data sources and analyses provide insight into the location of infill activity and land vacancy, and thus of infill housing potential.

4.2.1 Metropolitan Infill Activity

A 2005 Joint Center for Housing Studies survey of census data from the top 100 metropolitan areas found that many cities were experiencing the greatest amount of infill development at their peripheries, 10 to 20 miles from the city center. Inner-ring infill (0 to 5 miles from city center) was significant in the 1990s, when an estimated 500,000 housing units were added to close-in neighborhoods. Figure 4 depicts the trends visually: while suburban expansion is dominant (black bars), suburban infill is also occurring (dark gray bars), as is increasing density at city centers (light gray bars).

[2] A software-based system for collecting, analyzing, storing, and managing spatial data and associated attributes, GIS is an important tool used by urban planners, transportation planners, social scientists and many others.

Figure 5: Sprawl Continues in Most Metros, but Inner-Ring Infill Activity Is Robust in Some Metros



Source: *State of the Nation's Housing 2005,* Joint Center for Housing Studies of Harvard University; JCHS tabulation of the Neighborhood Change Database, U.S. Census 2000. Numbers reported are for tracts that are within 5 miles of a metropolitan areas central business district, and had a population density of at least 2,500 people per square mile in 1980. Figures are for top 100 metropolitan areas.

4.2.2 Metropolitan Land Vacancy

Urban land vacancy is another measure of infill housing potential. At the aggregate level, a national study of the 70 American cities with populations of 50,000 or more found that, on the average, less than one-sixth (15.4%) of a city's land was usable and vacant (Pagano and Bowman 2004). Whether this level of vacancy can be considered "too low" or "too high" for a given metropolitan area depends on market conditions. In a hot real estate market, 15% may be perceived as a resource, "a vast supply of potentially developable land," while in a cold market such a level of vacancy may be regarded as a sign of distress or decline (Pagano and Bowman 2004). Furthermore, we can infer that in a growing or hot market city with a relatively low level of usable land vacancy, such as the 4% reported by Seattle, future infill activity will likely occur at abandoned buildings and on underutilized sites simply because vacant lots are in short supply.

4.2.3 California Infill Housing Potential

Increasingly, local and state governments are mapping infill potential. One of the largest such mapping databases has been done by the University of California in order to estimate the potential of infill to meet the state's ever-growing future housing needs (Landis et al. 2005).

While not a national study, the research provides careful infill estimation for the nation's most populous state. The study conservatively estimated that California has 220,000 acres of infill potential, most of which is located in southern California. Researchers predicted that this acreage has the potential to meet 25% of the state's housing needs, providing roughly 1.0 to 1.5 million units by 2025, and thereby to preserve approximately 100,000 acres of open space.

Notably, the study also found that in both northern and southern California, the majority of once-vacant and once-abandoned parcels had already been developed; brownfields and "underutilized parcels" constituted the remaining sites. In fact, 71% of California's infill sites are technically underutilized sites, also known as "refill" sites. That is, these sites are currently in use and occupied, but the appraised value of the structure on the site is less than the residual value of the land. Thus the sites are designated as "underutilized." This fact has significant implications for any developer of an underutilized parcel. A developer of an underutilized site needs to consider in his or her feasibility study the impact of changing land uses on the community, specifically addressing possible community opposition to increased density and/or the temporary or permanent relocation of displaced residents if the underutilized site has been residential.

4.3 The Community Development Corporation as an Affordable Housing Developer

In this study, we focus on infill housing development in the community development context for several reasons. First, over the past three decades, CDCs and the local community development systems in which they operate have become the primary, front-line investors in, and builders of, the economic and social assets of poor neighborhoods. Second, as housing developers, CDCs operate differently from for-profit developers in that they are often community-controlled, involving residents in everything from the development process to governance and operation of housing developments (Urban Institute 2005). Third, CDCs generally operate with a "double bottom line"; that is, fulfillment of a philanthropic mission, be it social justice or economic equity, is given equal weight to financial performance. Finally, we are interested in infill and CDCs because CDCs have promoted the reuse of vacant and abandoned property for decades, long before the "back to the city" boom in private development of the 1990s. Indeed, it can be argued that infill has been a cornerstone of urban CDC housing strategy.

CDCs affect affordable housing in three ways: (1) they increase the supply by developing additional units, (2) they improve the quality of existing affordable housing by bringing new stock online and rehabilitating existing units, and (3) they improve the distribution of affordable housing by responding to demand for housing at various levels of affordability and need.

Over the past 30 years, more than 4,600 CDCs have been formed in communities across the United States. They have become essential providers of community economic development and community building services, and have become significant producers of affordable housing. While for-profit developers still lead the nation in annual production of affordable units, CDCs produced an average of 86,000 housing units annually in the 1998 to 2004 period, up from 27,000 units in 1994, according to the 5th National Community Development

Census conducted in 2005 (Figure 6). This figure includes rental and homeownership housing, detached and multifamily, at all levels of affordability.

Figure 6: Increase in CDC Housing Production, 1991–2005

Census Year	Average number of new units built yearly	Change
1991–1994	27,000	N/A
1994–1998	62,000	+129%
1998–2005	86,000	+39%

Source: 5th National Community Development Census, National Congress for Community Economic Development (2005).

As policy making and funding have devolved to the state and local level in the past two decades, community development corporations have had to develop specialized, internal capacity not only to develop real estate, but also to manage the array of government funding programs that subsidize production of affordable rental and homeownership units. Subsidy streams such as HOME, CDBG, HOPE VI, LIHTC — and the expertise needed to access and comply with the requirements of these subsidies — are essential to the success of nonprofit real estate development.

5.0 Research Questions

The aim of this study is to describe the potential and limitations of infill housing development in the community development corporation context. To do this, we relied on interviews, focus groups, and an electronic survey.

5.1 Electronic Survey

The survey was conducted over a two-week period in July 2006. Executive directors of 238 CDCs that operate as NeighborWorks® America member organizations were invited to take an online, anonymous survey regarding their infill development practices. Please see Appendix E for survey questions and aggregate responses.

In particular, the survey sought answers to the following questions:

- What is the scale and volume of infill housing development among CDCs in the NeighborWorks® network?
- What factors shape the way these CDCs practice infill housing development?
- What factors constrain these CDCs when developing infill housing?

5.1.2 Characteristics of Respondents

By far, the majority of survey respondents (95%) said that their organization practiced some form of real estate development. When compared to the larger universe of all NeighborWorks® organizations, we found that real estate practitioners were overrepresented in this survey: just 180 of the 244 total NeighborWorks® organizations (73%) reported operating real estate lines of business. In addition, two-thirds (67%) reported that their CDC was operating in a "hot market, where housing demand outpaces supply and home prices have appreciated steeply." General characteristics of the universe of NeighborWorks® organizations are described in Appendix D.

5.2 Interviews and Focus Groups

Of those queried, 98 organizations, or 41% of the total, responded to the survey. Of those who responded to the survey, forty (40) respondents elected to self-identify at the end of the survey.

Among those who self-identified, nine (9) attended a focus group held in Washington, DC, and seven (7) were interviewed individually via phone.

In interviews, we sought to understand the following:

- How might a CDC assess whether infill development is appropriate for the organization?
- What are the alternatives to infill housing development?
- What do successful models of CDC infill housing production look like?

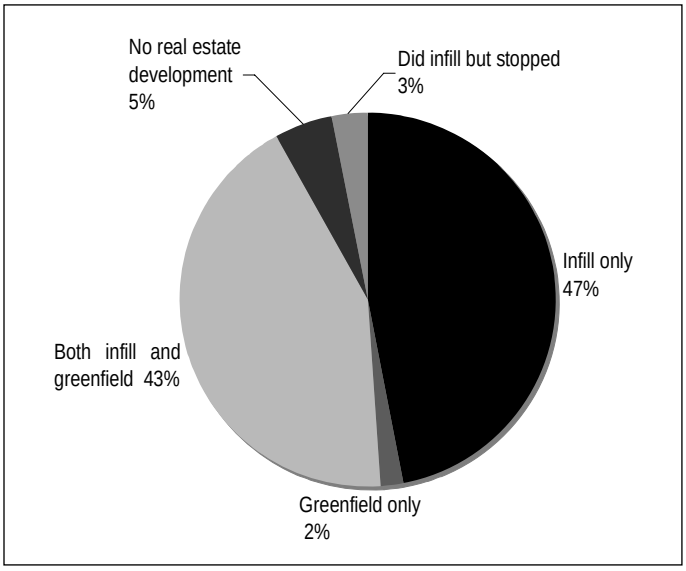
6.0 Infill Survey Results

While we found important variations among the organizations surveyed and profiled, we also found enough uniformity in responses to discern broader characteristics of CDC infill activity, as explained below.

Result #1: Infill is a Widespread Practice

As shown in Figure 7, among the 98 respondents, 95% practiced or had practiced some form of real estate development, on greenfield and/or infill sites. Responses were nearly equally split between those CDCs that practice only infill development (47%) and those that practice infill *and* greenfield development (43%).

Figure 7: Responses to "Please tell us what best describes your organization's activities (choose one)."



We also found that a small minority of organizations reported that they either did "greenfield only" (2%) or "did infill but stopped" (3%). Several of these CDCs were interviewed via phone following the survey and offered several explanations for not practicing infill development, such as community opposition to multifamily units, lack of municipal support (i.e., lack of sufficient subsidies), and market context (i.e., high cost of land). CDC executive directors in two hot market contexts explain below why they are discontinuing infill development:

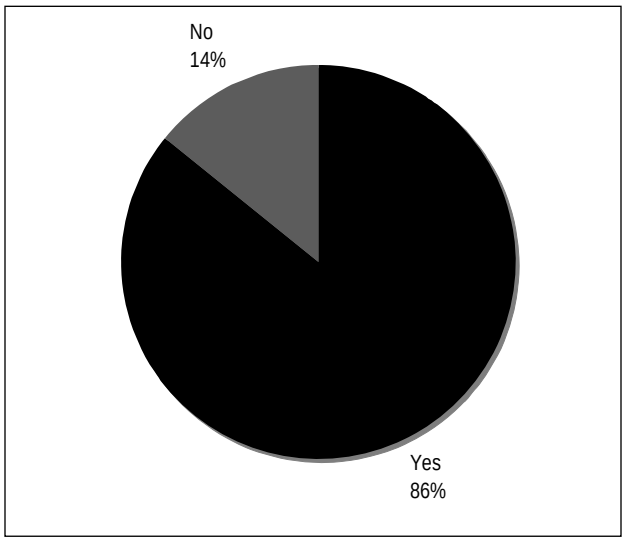
> "We stopped infill development for two reasons: the economics didn't work and there was no local support in some towns. In [my state], in order to do low-income housing projects, you need to get a Resolution of Support from the local government. In [my town], the city refused to issue resolutions for our multi-family infill projects because they felt that there was already too much rental, too much low-income housing in the city."

> "We are still working on a major infill development in the city, but as far as future projects go, we're out of land in the neighborhood. What's left is way too expensive. We are thinking of doing our next development out in [the suburbs] where a lot of our community members already live."

Result #2: Low-Volume, Low-Density, "Patching the Quilt" Infill Is a Popular Practice

As shown in Figure 8, a significant majority of CDCs (85.9%) responded that they would "consider small scale (1–5 unit) development on scattered parcels throughout a neighborhood." The significance of this response is its contrast to the widely held perception, confirmed in interviews with practitioners, that small-scale, scattered-site development is operationally complex and among the most expensive (highest per unit development costs) types of housing development. It would appear that in spite of the difficulty and cost associated with what practitioners call "filling in the missing teeth" or "patching the neighborhood quilt," it is still widely practiced among organizations surveyed.

Figure 8: Responses to "Would your organization consider small scale (1–5 units) development on scattered parcels throughout a neighborhood?"



So why are so many CDCs practicing small-scale infill development? As we discuss in detail below and in Section 8, a CDC's interpretation of its mission, whether as housing production or as revitalization, whether as local or as regional, and its real estate market and municipal context, are major determinants of whether a CDC practices small-scale, scattered-site infill development.

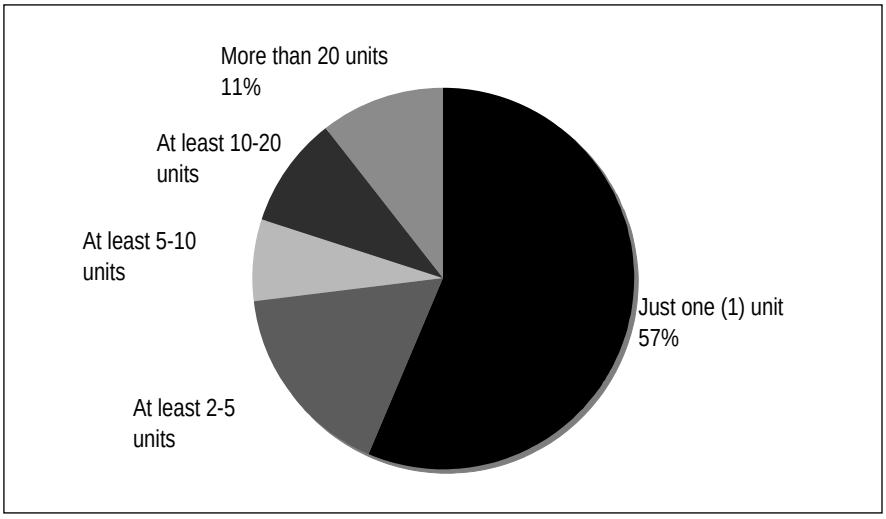
Result #3: Low-Scale Development Dominates, but to Some Scale Matters

One of the aims of this study was to gauge how responsive CDCs were to the financial and operational benefits of higher-volume (e.g., more units per development location) and greater-density production (e.g., more units per acre or per site). Both volume and density affect per-unit development cost and per-unit management cost. Development and management are both scalable activities, so per-unit costs decrease as volume and density

increase. Achieving these economies of scale in real estate development is an important issue for infill development and a central issue for CDCs engaged in affordable housing development, particularly as CDCs strive for financial sustainability.

As shown in Figure 9 below, a majority of CDCs (56.5%) reported that they would pursue the smallest scale of development; specifically, they would "develop a site that will accommodate just one housing unit." This suggests that a majority of CDCs are relatively unresponsive to economies of scale. We are not surprised by this response. Indeed, for CDCs operating in narrowly delineated urban neighborhoods, "getting to scale" is difficult, if not financially impossible, because vacant property can be scarce and/or expensive and lots may be small. For these CDCs to achieve efficiencies of scale in affordable housing development, they would have to expand the reach of their service area, which for some would involve redefining or giving up part of their place-based mission.

Figure 9: Responses to "Please tell us what the minimum number of contiguous housing units your organization will consider for development on an infill site (choose one)."



A significant percentage of organizations responding to the same question, however, reported that their development threshold was considerably higher: 20% said that the "minimum number of contiguous housing units" they would develop was 10 units or more on a single site. In interviews, these organizations explained that their reasons for practicing larger-scale infill development involved both internal and external factors.

In particular, both organizational mission and market context influence an organization's infill scale choices. Several respondents were nonprofit affordable housing producers, whose mission centers on housing production rather than neighborhood revitalization per se; they explained that they forgo small-scale development and do larger-scale development as a means of reducing per unit production cost and per unit overhead. A nonprofit affordable housing director from a hot-market city explained:

> "We're an affordable housing producer…we don't do smaller projects because the financials just don't work out. Don't get me wrong, we've done scattered-site

> development — and families became homeowners — but as an organization, we lost money. We can't do that very often. For us, anything less than five units doesn't pencil out."

Often these organizations are responding to the realities of strong real estate market contexts, in which land and construction costs are high and threaten affordability of units. These CDCs appear to be particularly responsive to the benefits of scale:

> "The cost of land out West is a big, big issue for affordable housing producers. Acquiring a single 5,000 square foot lot can be $5,000 or it can be $25,000. In cities like Santa Fe or Denver, it's more than $50,000…in places with really high land price, scale and density are big issues. You see affordable housing developers hedging in the same way that private developers might — by building scale and by purchasing land far in advance of project start."

Another nonprofit affordable housing producer interviewed explained that municipal context often drives scale:

> "Scattered-site infill is not the answer for us. Not only is single-family infill typically more expensive than single-family suburban, but [also] the reality is that growth boundaries in our communities out West don't allow us to do single-family infill. Multifamily infill is what we do now. On the rare occasions that we do single site infill, we really try to look strategically. In [my city], we look at where the city planners are concentrating transportation nodes and then look for possible acquisition rehab and/or infill sites nearby."

Result #4: Infill Development Takes Many Forms

Contrary to popular perception, infill development is not confined to single-family, detached development. Among CDCs interviewed, we found that the most common definition of infill was that of a small lot in an established neighborhood, ideally redeveloped as a single, detached homeownership unit. However, as shown in Figure 10 below, a significant proportion of respondents reported that they developed infill properties for both homeownership and rental use, as well as mixed use. Choice of housing typology is determined by market demand and community context, as explained by one CDC executive director:

> "When we think about redeveloping an infill site, we first look at our target neighborhood and we address whatever need they have, be it single family homeownership, multifamily rental, or condo."

A small but significant minority of CDCs that operate in extremely strong real estate markets, where high demand over the last decade has led to development of nearly all vacant and abandoned lots, reported that their infill development choices are limited to underutilized buildings and lots as mixed-use projects, combining residential units with commercial or community uses. A nonprofit affordable housing producer in California explained her situation:

> "In [my city], the low-hanging fruit is gone. Our infill isn't about vacant lots or abandoned buildings — those have been developed. We're working with the city to gain access to the air rights above municipal buildings for multifamily affordable housing."

As shown in Figure 10, one-quarter of respondents indicated that their infill projects were mixed-use. A CDC intermediary suggests reasons for mixed-use development:

> "To deal with higher land prices and the scarcity of single lots, most place-based CDCs have to change the way they're doing business … they need to build more density and build mixed-use developments to gets the per unit or per square foot cost down. Instead of building single family homes, the CDC has to look at town homes or mix-use, with commercial on the ground floors and housing on the upper floors."

Figure 10: Responses to "If you practice infill housing development, please tell us what type of development your organization does."

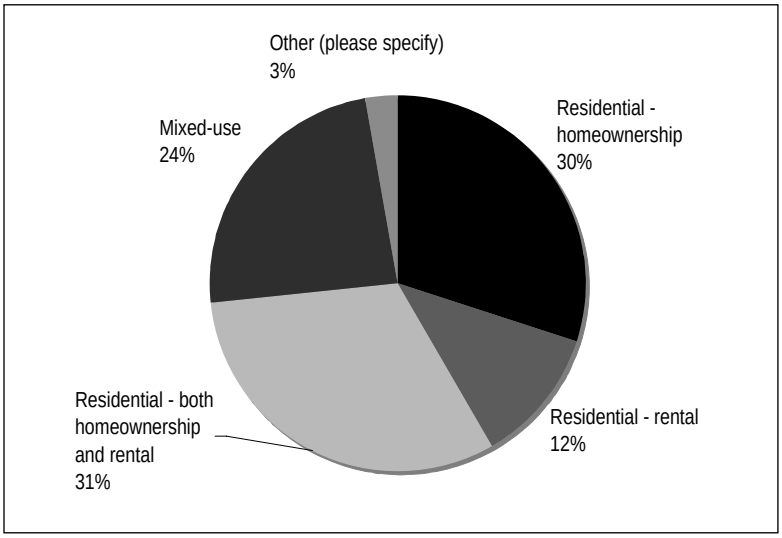
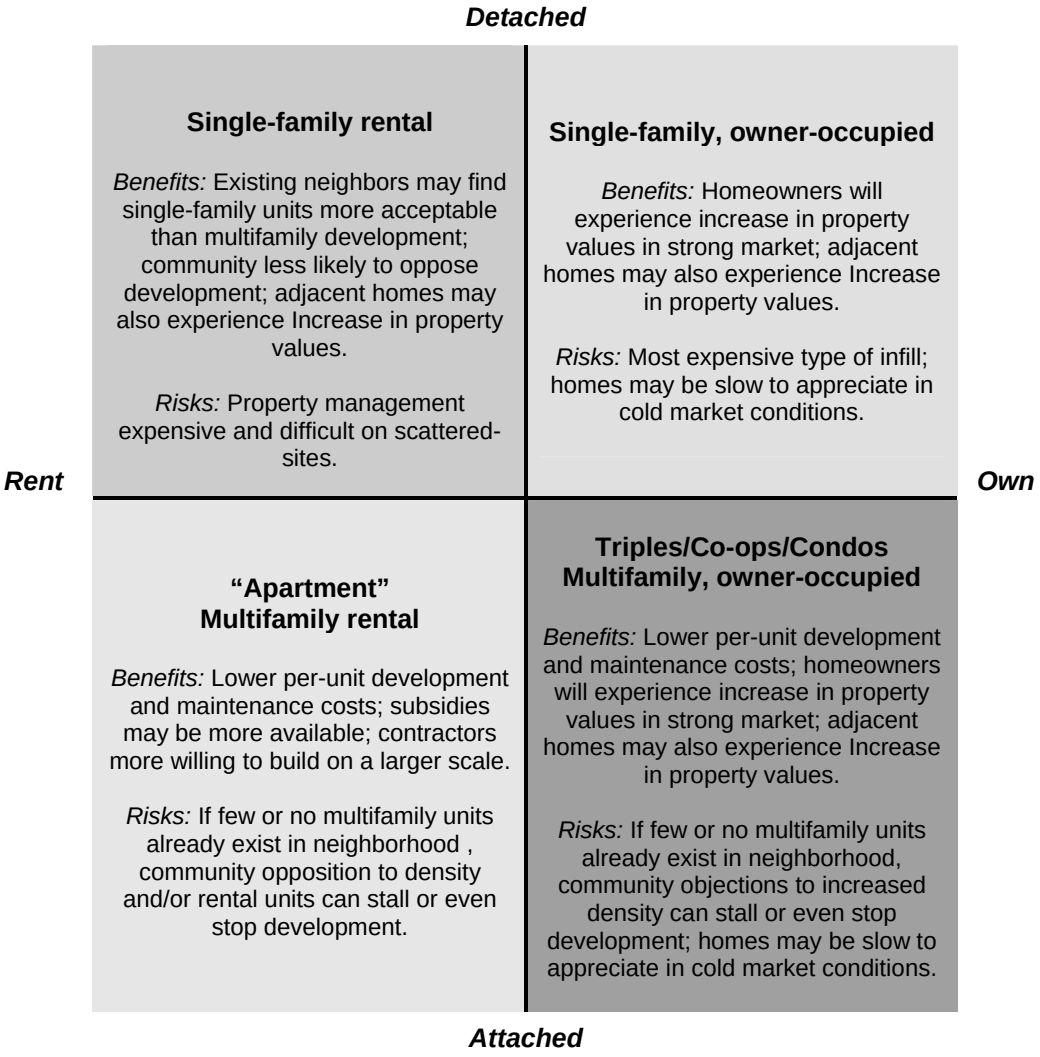


Figure 11 summarizes benefits and risks to the developer of each infill housing typology. Notably, while most CDCs interviewed agreed that detached homeownership units generally meet with the least amount of resistance from existing neighborhood residents, other CDCs, particularly those operating in "hot market," urban settings, indicated that these units are also the most expensive (per unit) housing type to build, and that primary demand was not always for homeownership units.

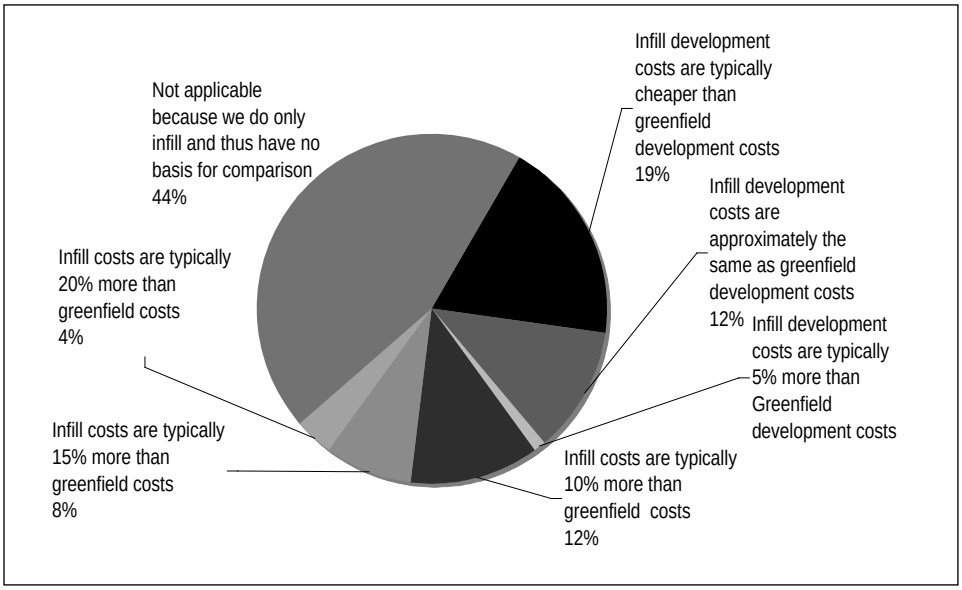
Figure 11: CDC Infill Housing Typologies and Implications for Developers



Result #5: Infill Cost

CDCs do not always perceive infill to be more expensive than greenfield development. As illustrated in Figure 12, contrary to expectation, surveyed practitioners who practice both greenfield and infill development did not overwhelmingly report large cost differences between the two types of development. While 29% of those surveyed reported that infill costs were greater than greenfield costs, 21% reported that infill cost were the same or cheaper than Greenfield costs. This difference was not as significant as we had expected.

Figure 12: Responses to "In your experience over the last five years, how does the cost of developing infill compare to the cost of developing greenfield, in terms of total development cost per unit?"



As we discuss in Section 8 below, several CDCs have developed mechanisms for controlling or reducing infill development costs. For example, standardization of production is a cost-reducing strategy that several CDCs have deployed:

> "It's definitely more expensive to do scattered-site production, but in the past couple of years, we've been able to keep infill development costs down by standardizing our production. We've built the same house with the same floor plan for six years. The downside of that is that our homes are easily identifiable in a neighborhood. Now we're trying to adapt the homes into the existing neighborhood a little more by doing 'sensitive infill' and using five floor plans."

Notably, although only one interviewee affirmed that her organization had begun using modular product for infill homes, a majority of interviewees said that they had considered or were examining the costs and benefits of using modular and manufactured housing for infill development. As one Western consultant explained:

> "Most, if not all, of our groups do stick-built construction. I've heard folks talk about prefab but the challenge is matching a pre-fab product to a neighborhood architectural style of the 1950s…without question, you can achieve cost reduction by using manufactured products, but at the end of the day, it doesn't measure up stylistically."

Other CDCs have controlled costs by carefully and strategically matching internal capacity to development. For example, some CDCs that focus on housing have carefully put together development teams to reduce the development timeframe, and thus cost and contingencies, by bringing operations such as design and construction management in-house. Some have

forged long-term partnerships with reliable vendors who provide essential services in the development process, as explained by the executive director of a Southeastern CDC:

> "A big part of our success in [our city] is the fact that our general contractor has worked with us for six years. He's not on staff, but a business partner. Although we put every project out to bid, he generally wins our contracts because his pricing is so good. We have a great relationship and he understands our needs and expectations, especially what we are able to pay. His subcontractors also understand affordable housing production and work hard to make sure that costs don't threaten affordability."

Other interviewees explained that they controlled costs by developing relationships with supportive municipalities that allow them access to sites at prices significantly lower than market rate. However, in general, among survey respondents and interviewees who indicated that infill costs were more expensive, a majority suggested that land acquisition was the biggest single factor driving up infill development cost in their market context, usually a hot real estate market. As one CDC executive from a Western town explained:

> "As an organization, we focus on moderate income housing, 50–80% of AMI [area median income]. We used to build houses in town but with the boom in retirees and second-home buyers from California, land prices have shot up to $40,000 to $100,000 per acre, making it hard for us to do any development. We're working with several state agencies and the town now…everyone supports it but no one has the whole solution."

Over the past decade, several studies have attempted to illustrate the magnitude of the difference between infill and greenfield costs (Figure 13).

Figure 13: Development Cost Comparison: Infill versus Greenfield

Development Type	Low	High
Infill	$119	$171
Greenfield	$87	$131

Source: Local Government Commission, Sacramento CA (2005).

Aside from land acquisition costs, developers of infill must also take into consideration higher construction costs, particularly in fast-growing cities, where there may be a shortage of construction labor. They may also need to make allowances for additional site predevelopment costs, including demolition and possible remediation of the property. A study by the city of Chicago in the late 1990s found that it spent $1–2 per square foot to remediate an industrial site for industrial re-use, but that it costs $7–15 to remediate the same site for residential use (Northeast-Midwest Institute 2001).

Other studies suggest that infrastructure costs, the so-called "linear costs" such as sewer, water and streets, associated with infill development appear to be the same or cheaper than the costs associated with greenfield development.

> "The marginal extra cost of accommodating a new residential unit or increment of commercial floor space tends to be lower in established urban areas than in greenfield peripheral development sites, because infill and densification in existing urban areas can use existing available infrastructure capacity rather than requiring the extension of urban services to areas that are previously unserviced. This is not to suggest that the costs of infill or densification are zero. Growth in established areas often requires infrastructure upgrading and usually adds to the load of area-wide infrastructure in some ways (e.g., water supply, sewage treatment capacity, major road systems, parks). However, the total cost of infill/densification for roads, water, sewer, drainage, and parks can be lower than the cost of opening up new growth areas." (Coriolis Consulting 2003)

7.0 The Unique Constraints and Risks Posed by Infill Development

While one can argue that the issues and complexities of infill development overlap with non-infill real estate development by as much as 80%, infill does pose unique constraints and risks to the affordable housing developer at nearly all stages of real estate development. Identifying and then mitigating these risks is the job of the developer and his partners. In the survey and interview process conducted for this study, we asked respondents to identify "factors which constrain your ability to develop more residential infill in your neighborhood." We then sorted out those factors that were specific to urban infill development. Figure 14 categorizes and summarizes these factors.

Figure 14: Constraints and Risks Unique to Infill in the Real Estate Development Process

1. Feasibility and Predevelopment
In hot markets, site acquisition costs are greater for infill than greenfield sites. Competition for sites means that a nonprofit developer must move quickly and have access to working capital to compete with for-profit developers who can "pay more and pay now." Due diligence on infill can be complicated by a myriad of factors: conveyance/ entitlement of infill site can be time-consuming; site planning is often difficult because infill site may be small, necessitating site assembly to achieve feasible scale; demolition of existing structures and/or clean-up of contamination may be necessary; permitting process in a built-up neighborhood may be restrictive; displacement/relocation of existing residents on underutilized sites may be necessary.

2. Design
Designing for infill requires working with outdated zoning restrictions and building codes that often limit density and uses. It is difficult to design while meeting today's codes (e.g., off-street parking) and buyer preferences (e.g., large closets), while preserving old neighborhood character and layout. Community opposition to infill design is possible, often stemming from past experience with bad, poorly designed infill development, fears of increased traffic, lack of community facilities, and other impacts.

3. Financing
Lead time for federal subsidies requires patience on the part of development partners. From predevelopment and acquisition financing to construction financing and permanent financing, traditional financing sources may be wary of greater complexity and may lack the tools to evaluate financial risk from development externalities; for example, construction delays, greater security costs on construction sites, and unknown site contaminants pose risks to construction financing. Concerns about future value, operating costs (especially on rental properties), and ability to repay loans are factors that add risk to permanent financing. The trend toward standardization of mortgage products for resale in the secondary market has resulted in an unwillingness of some lenders to finance nontraditional projects, such as urban, mixed-use projects (Wyley and Hammel 1999).

4. Construction
Low-volume, scattered-site development precludes construction economies of scale. Furthermore, an urbanized setting complicates construction with issues like traffic stoppages and site safety and crime, resulting in greater contingency costs. Finding a contractor willing to work in an urban setting may also be difficult.

5. Marketing
In soft markets, if the CDC is trying to attract higher-income residents in order to achieve a mixed-income neighborhood, convincing them that home prices will appreciate can be challenging.

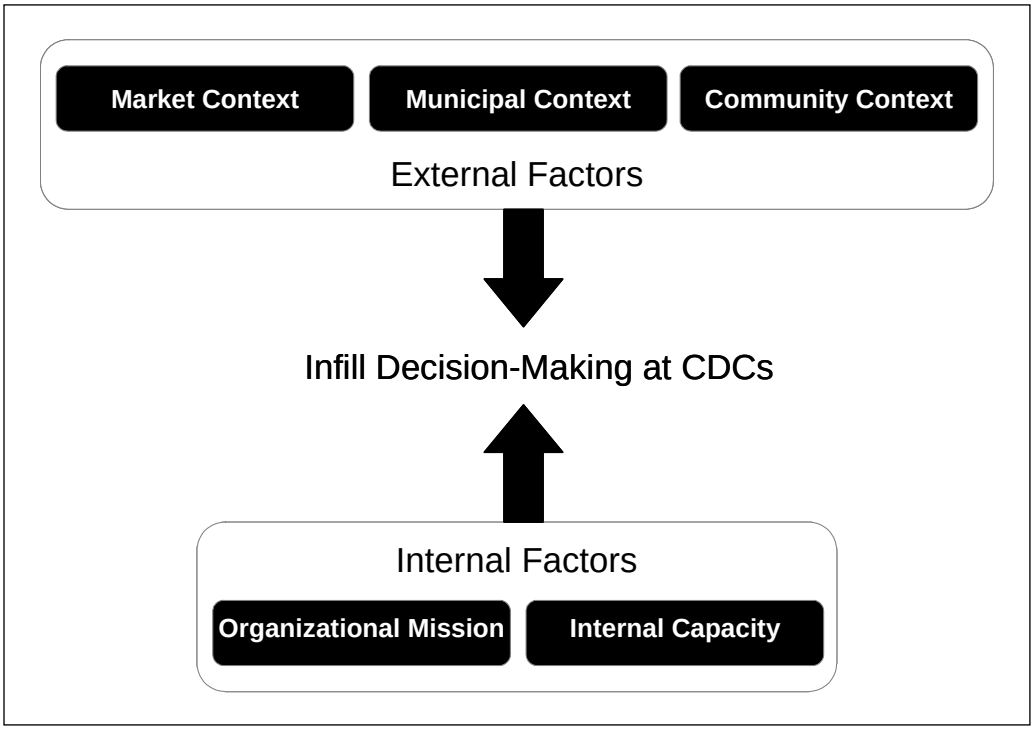
6. Sale or Property Management
If developing multifamily rental properties, the long-term challenge is efficient, cost-effective property management. If properties are scattered, management costs will be higher; if properties are dense and high volume, then per unit management costs should be more reasonable.

8.0 Drivers of Infill Development Decision-Making

With the experiences and constraints described by community development practitioners in Sections 6 and 7 as background, we now delve into those factors that influence a CDC's decision whether to pursue infill housing development, be it rental or homeownership, detached or multifamily. We are interested in this question because we find that infill housing development is a double-edged sword for many CDCs: they perceive that it can deliver significant benefits, in terms of housing and community revitalization, but they may underestimate the financial risks and operational challenges involved.

Interviewees and survey respondents cited multiple factors that determine how they approach infill development and how those factors influence project success or failure. Broadly, these factors can be organized into five categories: (1) community context, (2) municipal context, (3) real estate market context, (4) internal capacity and (5) organizational mission (Figure 15).

Figure 15: Key Factors Shaping CDC Infill Development Decision-Making



8.1 Community Context Considerations

Community context:
Perceptions, attitudes, and resources that characterize a residential neighborhood

The defining characteristic of infill development, which sets it apart from other types of real estate development, is that it occurs in an area with existing social and physical infrastructure, in a built-up community, among residents and existing homes, schools, organizations and businesses. While residents of a disinvested community are generally supportive of infill

housing, especially when it replaces abandoned buildings or vacant lots, occasionally some prior residents do not welcome infill development. Like their suburban counterparts, single-family homeowners in disinvested communities may object to multifamily developments. In other instances, existing residents of a low-income neighborhood may welcome the development but voice objections to the "housing mix," particularly if it includes market-rate housing, which may spark fears of displacement or "gentrification" in hot market cities.

Community support for infill affordable housing development can be more problematic when an affordable housing developer enters a predominantly market-rate community, where existing residents often perceive affordable housing as a threat to their property values. Existing community residents' support for — or opposition to — infill housing development is a serious factor for both the nonprofit and for-profit affordable housing developer to consider. Whether the development occurs in a predominantly market-rate community or a disinvested community, when existing residents effectively mobilize their concerns and contact the media and local political institutions, such as zoning boards or city council members, the city may in turn require anything from cosmetic façade changes to complete redesign of the development in order to obtain zoning or permitting approval. In the worst case (or the best case, depending on one's viewpoint), a city may refuse to rezone or permit a development, effectively killing the project.

In either case, we find that existing neighborhood residents can be allies as well as opponents of infill affordable housing development, as summarized in Figure 16.

Figure 16: Community Context for Infill Development

	Characterization	Implications
Community Context	**Supportive**	• Has neighborhood revitalization plan that recognizes and supports CDC mission and development goals • Perceives benefits of infill (increased property values, decreased crime, better community amenities/infrastructure) • Potential political partner in infill development planning and permitting process
	Unsupportive	• Perceives that infill development will negatively change the neighborhood, decreasing property values • Actively opposes infill development, particularly rental and multifamily typologies, causing time delays and possibly driving up predevelopment costs • May engage political institutions to stop development

Existing community residents may oppose new, affordable housing development for a variety of reasons, including but not limited to the following:

- Proposed development does not reflect their needs; i.e., "too many" or even "not enough" very-low-income units, too many market-rate units, or not the "right" mix;
- Previous "bad experience" with a developer who built a home inconsistent with the historical character of the neighborhood;

- Perception that increased density, in the form of multifamily housing, may cause an increase in traffic or noise;
- Perception that infill development does not adequately preserve open space or other environmental qualities;
- Perception that additional rental housing units in the neighborhood will exacerbate neighborhood instability;
- Perception that infill development will be "cheap" or "ugly," rather than a new community asset that provides homes for the workforce, the elderly, and the disabled; or
- Belief that infill development will lead private developers to the hitherto "undiscovered" neighborhood and, in the long run, result in displacement of existing residents.

While many of these objections have been shown to have no correlation with actual infill affordable housing development, at the heart of each of these objections is generally an interest in preserving the value of existing homes. A CDC director operating in a steadily growing southern market explained his most recent experience with a community that opposed a proposed affordable housing development:

> "A couple of years ago, we ran into NIMBYism when we tried to develop a 100 foot by 150 foot double lot into a 7-unit condo project for lease-purchase candidates. It was in a very large, old neighborhood that encompasses 117 blocks of [the city]. We applied for and received rezoning approval from the city, but the neighborhood association objected to the rental aspect of the project…We ended up withdrawing our request for rezoning and instead built single-family homes."

This particular story of community opposition is not uncommon. Virtually any time that a developer — affordable or otherwise — introduces a structure that is out of character, in terms of density, typology or façade, with the surrounding neighborhood, some form of resistance from community members is likely.

Ideally, for infill to be successful a community planning process, whereby existing residents and businesses develop a shared vision for the neighborhood and identify sites for redevelopment, should precede site development. This process should be distinct from the development process: only once sites have been identified, should they be marketed to developers. A CDC executive director in a strong-market city explained the importance of community planning:

> "We spent a lot of time on the community planning process. We had neighborhood meetings for almost two years to determine what to build on the site, then a two-day charrette where residents could see, in real time, the effects of different affordability levels on the financial viability of the development…At the end of the day, our constituents were not just a part of the planning process, but they ended up being very effective advocates for our project

> when it came to winning site control. The community organizing aspect of the development was central."

In the absence of a formal community planning process, interviewees suggested several alternatives:

> "One of the first things that I'd advise a CDC to do before starting an infill project is to spend time with existing homeowners and understand what it's going to take for them to tolerate the development."

> "We work in a half-dozen communities and each is different. The first thing we do is to gauge the local community's attitude and what their idea of low-income housing is. Do they actively want to include affordable housing in their community improvement plans? What type of housing are they willing to support? Homeownership? Family rentals? Elderly rentals? Homeless shelter? After that, we research the actual need — where the demand is — and figure out whether we can fit that into the community."

Regarding the community planning option, several CDCs interviewed suggested that community planning was a means of bridging their "people-centered" programs with their housing programs. Community planning and getting a community organized behind a plan can also help a project through the zoning and permitting process, particularly when a CDC is seeking increased density on an infill site. In most municipal contexts, "local governments have viewed it as their job to protect the 'character' of their neighborhoods, and that means maintaining existing densities" (The Housing Partnership 2003). A city council member from a major, weak-market city further emphasized this point:

> "CDCs really need community organizing expertise in order to push through plans for density. On the City Council, we need to know that a neighborhood is behind the increase in density."

A credible community planning process not only ensures that the needs of existing residents are incorporated into the design, but also reduces opposition to development and increases CDC legitimacy. Community planning can also result in improved design, increased visibility for the project among prospective funding organizations, and accelerated zoning and permitting approval. Community planning may also improve the internal capacity of a CDC by engaging disparate programs within the organization — community organizing and real estate development — in interdependent work.

8.2 Municipal Context

> **Municipal context**
> Perceptions, attitudes, resources, policies, practices, and goals that characterize local government bureaucracy and political leadership

The municipal context in which a CDC operates shapes its infill development practices in three crucial ways: (1) political, (2) financial and (3) technical. Local governments regulate

infill development by overseeing building codes, zoning and the construction permit process, all of which are technical issues that have the potential to become political issues as well. These regulatory processes are designed to ensure, among other things, that new development achieves the goals set forth in a city's stated master plan or revitalization strategy. Municipalities may also use these processes to ensure that new developments are safe, and are not objectionable to existing neighborhood residents. For example, upon notification of opposition from existing residents, a zoning board may withhold an up-zoning request or make permits contingent upon changes to the development's design or density, thus adding weeks or months to the development time frame and adding further costs. A supportive political context, however, can have the opposite effect. For example, in a city with an explicit affordable housing goal as part of its master plan, a CDC that builds affordable housing might benefit in terms of access to sites at cost and expedited permitting.

Local governments are often the primary sources of funding for affordable housing development. They provide CDCs with access to development financing in the form of federal and state subsidies such as CDBG and HOME. CDCs also look to local governments for in-kind support, in the form of publicly owned or controlled developable land at reduced or no cost, and property tax abatement. Below, executives at two different CDCs describe how a supportive municipal context affects site acquisition costs:

> "Our city wants diversified income groups living in the city. They also have an interest in maximizing property tax revenues, so they're good partners for us, especially in terms of identifying foreclosed properties. The properties typically have liens of $10,000 or more for failure to pay utilities, but they're only worth $3,000 to $5,000…When the value of the lien equals the value of the property, the city steps up and claims the property and then works to re-sell it to a builder or individual. The sales price of these lots averages $500, roughly equal to the cost of closing fees. The city goes through the county to release the property from county tax and school tax liens with the understanding that the property will be developed and generate tax revenue in the near future."

Local governments may also act as land banks. For decades, cities have banked not only tax-foreclosed properties (such as those described in the above quote) but also old schools, libraries and municipal properties. Indeed, it is very common for cities to become involved in the development process through public-private development, wherein the city provides benefits, such as low-cost land and expedited or discounted permitting fees, to the developer in exchange for developer provision of public benefits, such as production of affordable housing or redevelopment of public spaces such as parks. A nonprofit affordable housing developer in Chicago described her municipal context in this way:

> "In order to keep costs down, our strategy has been to get 90% of the land at $0 from public entities or banks that have foreclosed on properties. When the city had a Tax Reactivation sale, basically an auction of foreclosed properties, they would bid on our behalf. We got properties at $2,500 per lot, which was basically the cost of legal fees to perfect the title."

Figure 17 summarizes characteristics of supportive and unsupportive municipalities.

Figure 17: Municipal Context for Infill

	Characterization	Implications
Municipal Context	**Supportive**	Local government: • Understands benefits of infill (property tax revenue, anti-sprawl, spurs redevelopment, revitalization, inclusionary zoning) and prioritizes infill; • Has action plan or strategy to increase infill development; • Is supportive of increased density projects like multifamily; • Is willing to subsidize developer and/or homebuyer for infill housing development; • Is willing to provide infill sites to CDC at reduced rate or first refusal; • Has revised zoning and code language to remove barriers to infill and to improve compatibility between existing development and infill development; and • Has streamlined entitlement process.
	Unsupportive	• Zoning and code language does not define or distinguish infill from other types of development; • No provision of infill sites to affordable housing developers at reduced rates; and • Few or no subsidies available for affordable housing builders.

One might now ask, what distinguishes a CDC seeking subsidy from a city for affordable housing on an infill site from one seeking subsidy for affordable housing on a greenfield site? The answer lies in cost. As discussed earlier, infill development is generally more costly because sites are more expensive, as explained by the director of a CDC in a fast-growing southern city:

> "We work with the city to identify sites sometimes. But for the most part, we pay market prices for the infill lots. Lately, the land cost is just so extraordinary that we can't make the development work because we can't get the subsidies. So we're doing more greenfield because the number of infill lots available at a decent price is diminishing."

Infill design and construction can also be more costly because existing zoning codes and land use plans do not encourage — or envision — infill development. Limits on building foot-print, height limits, single-family requirements, setback and off-street parking requirements, and mixed-use restrictions are just some of the technical barriers limiting a CDC's capacity to design for infill development while also preserving affordability. Wheeler (2001) illustrates these technical problems by comparing "typical" San Francisco Bay Area zoning requirements with "infill-friendly" alternatives, summarized in Figure 18 below.

Figure 18: Typical San Francisco Bay Area Zoning Practices and Infill-Oriented Alternatives

	Typical Current Practice	Infill-Friendly Alternative
Minimum lot sizes	Minimum: 6,000 square feet or more Maximum: Rarely regulated.	Minimum: 2,000–4,000 sf, if any Maximum: 5,000 sf for single-family is typical.
Dwelling units allowed per lot	Most urban land zoned for single-family detached housing.	Allow second units on existing lots; allow multiple units on vacant lots in single-family districts if building design respects neighborhood context.
Allowable densities, downtown areas	Many suburban cities specify maximum residential densities of 20–40 dwelling units per acre, even in high-density zoning districts.	Establish minimum densities; rely on height, bulk and/or design restrictions instead. Institute minimum densities of 20–30 dwelling units per acre.
Height restrictions, residential areas	Often 2–3 stories maximum even in town centers; no minimum.	At least 3.5 stories or 40 feet maximum.
FAR — Floor Area Ratio (ratio of total building floor area to the area of its zoning lot)	Often 0.50–0.80 maximum in downtown locations.	At least 1.0–2.0 maximum with 0.5 minimum in downtown locations; or use height limits instead.
Parking	Varies widely: Minimum requirements range from 1.0 space per unit in San Francisco and Berkeley to 2.3 in Dublin and 2.5 in Los Gatos.	One (1.0) space per unit, no requirement in core transit areas; encourage developers to charge for parking to reduce demand, and to provide car-sharing services within large projects; allow space-saving techniques such as stacked parking and tandem parking.

Source: Adapted from Wheeler 2001.

8.3 Market Context Considerations for Infill Development

> **Market context**
> Composite perception of local real estate supply and demand trends, as discerned by a variety of factors, including rental market performance (as indicated by vacancy levels and affordability gap between average local income and average market-rate rents) and homebuyer market performance (as indicated by sale prices, sale activity, median single-family home price and median condo price).

Market context shapes CDC infill development in several fundamental ways. Local real estate market context is a major determinant of size and scale of development, as well as of housing typology (e.g., homeownership, single-family, multifamily). One of the first assessments that a CDC real estate development director makes is whether a market exists for the product he or she seeks to build and, more important, whether financial partners also think that that market exists. As one CDC development director in the Northeast expressed:

> "We always, always assess the market first. Infill is no different from other real estate in this sense. We always ask: can we really sell this house at this price point and still get enough subsidy to build it?"

Although real estate markets, particularly the markets for infill affordable housing, are extremely localized, it is possible to characterize broadly the market contexts in which many CDCs operate. At the extremes are the growing or "hot market" city and the slow-growth or cold or "weak market" city. The former refers to a real estate context in which the home price has increased at a rate significantly greater than the rate of household income. A slow-growth, soft, or weak market city refers to a real estate market in which the average home price is unchanging or decreasing due to high rates of property vacancy or abandonment. Figure 19 summarizes some of the characteristics of these market contexts.

Figure 19: Market Considerations for CDCs Practicing Infill Development

	Characterization	Implications
Market Context	**Hot Market**	• Infill affordable housing development is an opportunity to "preserve affordability" and prevent displacement of low-income residents; • Competition for sites is one of the bigger challenges for nonprofit affordable housing developer: for-profit developers often have ready resources for earnest money and predevelopment, and competition among developers tends to drive up land cost; • Infill investments are very likely to appreciate in this market; • Growth policies that do not explicitly accommodate affordable housing may exacerbate affordable housing shortages; on the other hand, infill affordable housing advocates have an opportunity to partner with anti-sprawl advocates for higher densities and other infill-friendly code revisions; • High demand for construction services; and • Infill affordable developers seek subsidies to write down the difference between what a low-income tenant or homebuyer can pay and the high total development cost ("affordability gap").
	Cold or Weak Market	• Infill affordable housing development is an opportunity to stimulate reinvestment and "create value" by leveraging existing assets: "physical fabric" of older, walkable neighborhoods, unique housing stock with historic or architectural character; • Infill is also an opportunity to "preserve value" of properties amid weak demand, low housing values, poor housing conditions, high vacancy rates and widespread abandonment, and declining neighborhood stability and quality of life; • Market uncertainty is a serious issue: will a new infill home appreciate in price?; • Infill housing is an opportunity to attract higher-income residents to historic but disinvested neighborhoods; • Successful infill development is typically coordinated with investments in education, crime prevention, code enforcement, and other city-led efforts; • Infill developers are likely to receive political support for neighborhood revitalization initiatives; • Developable, vacant land may be more accessible, less expensive; • Site assembly may be possible for large-tract redevelopment that can re-ignite neighborhood growth cycle; and • Infill affordable housing developers must seek subsidies to write down the difference between the low appraised values of surrounding homes and the total development cost ("appraisal gap").

8.3.1 Hot Market Context Considerations for Infill Development

Each CDC interviewed and surveyed for this study was asked to self-identify their market context. A majority of the survey respondents (67%) said that they operated within a "hot" market context, in which CDCs seek to build more affordable housing units in order to "preserve affordability" in their neighborhoods due to the critical shortage of affordable housing. Strong markets are also characterized by high site-acquisition and construction costs that "threaten the affordability" of a project, as explained by an affordable housing developer in a large strong market city:

> "We have a 25-lot threshold. In this market, pricing is everything. You can get better pricing, in terms of per-unit development cost, when you have more units for the builder to work on. To find a builder willing to do small quantity production and retain affordability is impossible. It's important to understand the threats to affordability and address them directly."

Site acquisition costs are higher in hot markets because nonprofit developers must compete for sites with for-profit developers who can "pay more and pay now." Furthermore, in hot markets that have experienced prolonged growth for a decade or more, vacant lots have become scarce and infill developers are left with underutilized sites, which are sites with existing structures that may or may not be occupied, and where the land residual value exceeds the appraised value of the structures. Predevelopment of underutilized sites, however, can be costly given the added costs of relocation of existing residents, demolition of existing buildings, and possible remediation of environmental contamination. Construction services also tend to be high in hot markets because demand for these services often outstrips supply.

The costs of site acquisition and construction are primary factors that "threaten affordability" and increase the total development cost of a project in a hot market. Whether in a hot market context or cold market context, as development cost increases so too does the need for subsidies. If subsidies cannot be secured, then the affordable developer has to make difficult choices: build more market-rate units, decrease the number of units that are designated affordable, or change the "affordability mix," e.g. build fewer units for very-low-income households (30% AMI) and instead build more "workforce" units for households living at 80–120% of AMI.

8.3.2 Cold Market Context Considerations for Infill Development

Several CDCs interviewed spoke of the need to spark reinvestment or community revitalization in a declining neighborhood through infill development, which indicates that they were operating in a weak market context. In weak market cities or neighborhoods, the concerns of community developers center on how best to "create value" amid stagnant or declining property values in neighborhoods that have suffered disinvestment. CDCs in weak market contexts may be less concerned with land cost because vacant and foreclosed properties are abundant; rather, they are primarily interested in ways to stimulate demand for properties in their "worn out" neighborhoods, where decades of out-migration and economic disinvestment are manifest in the abundance of boarded up, foreclosed properties.

In terms of affordable housing, the nature of the crisis in a weak market is not a shortage of land or housing, but involves weak demand, low housing values, poor housing conditions, high vacancy rates and widespread abandonment, and declining neighborhood stability and quality of life (Mallach 2005). In the most extreme weak markets, CDCs face the challenge of not simply "creating value" but of "preserving value," thus emphasizing programs aimed at preventing further decline in housing prices. These CDCs have generally witnessed large-scale foreclosure and abandonment due to real population loss, as described by a Midwestern CDC executive:

> "We work in a very, very cold market. Our city used to have 100,000 residents; now we have 60,000. Housing programs are very difficult because the market is so soft. Cheap properties are abundant…We don't actually do any redevelopment. In a market as cold as ours, with more than 10,000 vacant properties in our community, we are just trying to ensure that those properties still occupied don't lose even more value because of the vacancy and foreclosure rate of the neighborhood. In the past year, we have done more than 10 property acquisitions and demolished 75 buildings, cleared titles, and consolidated land for future use."

In combating vacancy and blight, it is not uncommon for local governments and CDCs in extremely weak market cities, such as the one above, to take an intermediate approach to infill development that involves very little vertical development of new housing units. Instead of maintaining vacant homes, they pursue land banking or "horizontal" land development, even going so far as to purchase foreclosed properties, demolish the abandoned homes, and mow lots.

In less extreme weak markets, CDCs focus on redevelopment of neighborhoods, using housing investment "as a tool for strengthening the city and its neighborhoods and improving the quality of life for the city's citizens of all income levels" (Mallach 2005). They do this by mapping neighborhood assets and developing infill housing in conjunction with other neighborhood revitalization strategies, such as economic development initiatives and foreclosure prevention programs. A Midwest-based CDC executive described focused infill development in this way:

> "We try to target our development to an area that is home to local institutions, like the bank, the church, the hospital complex. We pay more for properties in that area of town, but it's worth it because those have a chance of retaining value in the future."

As we explain in Section 8.4 below, real estate market context also informs and shapes the mission of a CDC.

8.4 Organizational Mission Considerations for Infill Development

Organizational mission
Basic overriding purpose of an organization, describing what the organization does, for whom, and how.

We found in our interviews that organizational mission, specifically a neighborhood revitalization mission, was one of the primary factors that influenced the decision to pursue single, scattered-site infill. Nonprofits with a strong emphasis on neighborhood revitalization appear more motivated to pursue small, scattered-site infill housing development than CDCs and nonprofits whose primary mission is affordable housing production. A weak-market, urban-based CDC director described his purpose in this way:

> "Our infill development was aimed less at building high-volume [affordable housing] and more at neighborhood, block-by-block revitalization. We took a traditional revitalization approach: we'd choose the worst house on the block and do a teardown or an acquisition-rehab that would spur other reinvestments in the neighborhood."

In assessing infill housing development options, one of the most important decisions that a CDC can make is scale: do we pursue scattered-site infill, which is inherently low-density and low-volume, or do we develop on a larger scale? As observed in Section 6, a majority of CDCs (56.5%) reported that they would develop "a site that will accommodate just one housing unit." Generally, single, scattered-site development is more expensive, costing more per square foot or per unit, than a higher-density or larger-scale development of the same quality.

We also observed a possible link between CDCs whose mission is "people-centered" and small, scattered-site infill development. "People-centered" nonprofits are more dedicated to community-building activities such as homeownership counseling, education and job skills training, personal finance and credit counseling, tenant advocacy, and community organizing. These activities share a common mission: connecting low-income residents to opportunities in the larger economy.

> "Nonprofits whose missions focus primarily on serving people view housing as one of many resources needed to meet their constituents' needs. They often view housing as the platform from which to deliver a wider range of services." (Diaz 2004)

People-centered CDCs are arguably as concerned about ensuring that a development meets important nonfinancial needs in the neighborhood as they are about the financial aspects of the development (i.e., minimizing per-unit costs and maximizing developer fees). For example, a CDC that uses infill housing as a means to teach construction skills to young adult neighborhood residents measures its performance in terms of individuals trained in marketable skills, as well as in terms of the number of affordable housing units that are developed.

Another interesting example of how the mission of a CDC shapes infill development choices is found in workforce housing development. Consider a CDC that is focused on skills training and job placement, but also seeks to build workforce housing. If the infill neighborhood is located in a close-in suburb and the majority of the region's jobs are in outlying suburbs, then infill development may not be an optimal choice. Instead, the CDC might consider developing workforce housing on a suburban greenfield site, closer to new employment centers, which are also suburban. Alternatively, they may consider acquiring infill sites near a strategic transportation hub or corridor that can carry close-in residents to suburban jobs. While this line of thinking may require an otherwise narrowly place-based CDC to reconsider its role in a regional context, the benefits to residents of housing that is proximate to jobs are well documented (Jargowsky 1997, cited in Karlinsky 2000).

In the context of organizational mission, it is important to note that a number of CDCs interviewed for this study asserted that development of small, scattered sites was not a "choice" but, rather, that "[infill] is the only game in town…infill sites are all we have to work with." These CDCs saw their mission as not simply revitalization but primarily revitalization of a particular neighborhood within a larger city. Interview data suggested that urban, place-based CDCs perceive infill as their only choice, and that their mission and legitimacy are closely tied to delivering affordable housing within a specific geography.

In contrast, a regional nonprofit housing developer is able to adjust for the high cost of infill properties by looking for sites outside of traditional neighborhoods. Furthermore, a nonprofit affordable housing producer may forgo small-scale development and be compelled to do larger-scale development as a means of reducing per-unit production and management costs. For organizations with this type of mission, and which are located in hot real estate market contexts, where land and construction costs drive up total development expenses, achieving economies of scale in property development and management is essential to the financial viability of the development.

As shown in Figure 20, different missions can lead to different infill development choices as well as different measures of success.

Figure 20: Organizational Mission Considerations that Shape Infill Development Decisions

Primary Mission	Characterization	Implications
Housing-centered	• Focused on affordable housing development; real estate development and/or management are primary programs • Seeks to address the shortage of affordable housing: the supply at a specific level of affordability, the supply of special needs housing, and/or the preservation of historic housing resources • May operate on neighborhood, city or regional level	• Measures success in terms of (1) number of units developed, (2) type of units developed — units for different levels of affordability or units for special needs, (3) maximizing developer fees in order to fund future development • Most likely to practice larger-scale, higher-density development, in order to minimize development costs per square foot • Least likely to develop single, scattered-site infill lots
Revitalization-centered	• Focused on community revitalization, often with multiple programs, including economic development, housing and community-building • Seeks "to build neighborhoods, not just houses" • Typically is community-based	• Measures success in terms of (1) whether project attracts new residents, causes existing residents to invest in their properties, attracts new business and additional reinvestment; (2) number of units developed • Likely to develop single, scattered-site infill lots
Community-building-centered	• Focused on community revitalization with emphasis on community ownership and empowerment, "developing communities from within" • Community-building programs such as homeownership counseling, credit counseling, and job and skills training are most common • Typically is community-based	• Measures success in terms of (1) outcomes from community-building programs (number of people trained, number of new homeowners), (2) number of affordable units developed • Likely to develop single, scattered-site infill lots, especially if development is linked to the organization's other programs, such as homeownership or job training

8.5 Internal Capacity Considerations for Infill Development

> **Internal capacity**
> Capability of CDC to meet broad community needs; components of internal capacity include: **resource capacity** (ability to attract, manage and maintain funding), **organizational capacity** (ability to manage, develop and lead staff and board), **programmatic capacity** (ability to build and manage housing, human services and economic development programs), **network capacity** (ability to work with other institutions), and **political capacity** (ability to effectively advocate within and outside of neighborhood). (Glickman and Servon 1999)

For decades, CDC capacity was viewed narrowly for the most part, in terms of financial capacity, fundraising capacity, and housing production capacity. A CDC that developed 20 housing units per year, by this definition, possessed greater organizational capacity than one

that developed five units per year. This definition is not surprising, given the fact that many of the earliest CDCs were established in close-in neighborhoods in response to decades of neglect. Their goal was to reverse the visible effects of decades of disinvestment or "mal-investment" in housing and infrastructure which had wreaked havoc on communities.

Today, there appears to be widespread recognition that CDCs may have objectives beyond housing (Vidal 2005), and thus a narrow definition of internal capacity in terms of financial resources and housing production is incomplete. Researchers now define internal CDC capacity more comprehensively, in terms of a basket of dynamic components that determine a CDC's capacity to succeed in its stated objective(s) and to adjust course in response to changing conditions: resource capacity, organizational capacity, programmatic capacity, network capacity, and political capacity (see above definition).

8.5.1 The Link Between Internal Capacity and Infill Development

What characterizes a CDC with a "high capacity" for infill development? To answer this question, we must first define the type of infill in question. Low-density, scattered-site production of 25 single-family homes throughout a large area, for example, is very different from larger-scale, higher-density infill development of 25 multifamily units on one site. As summarized in Figure 21, very different internal capacities are required by these two types of infill development.

Figure 21: Internal Capacity and Infill Development Challenges

Type of Infill Development	Examples	CDC Capacity Implications
Low-density, scattered-site development	• 25 single-family homes on multiple sites scattered throughout a neighborhood(s)	**Benefits** • CDC spends less time and effort building community support for project because low-density typology less likely to elicit community opposition **Costs** • CDC staff time is dominated by non-scalable aspects of the development process, such as acquisition and due diligence process for each site. • CDC does not enjoy economies of scale in construction or property management (if rental) because sites are scattered.
High-density, high-volume development	• 25-unit multifamily development on one site in an infill or greenfield location	**Benefits** • CDC is more likely to reach economy of scale in construction and property management, because of single location. **Costs** • CDC spends more time building local support for development because larger footprint and higher density typology may elicit community opposition; "designing for infill" is the challenge. • CDC needs sophisticated skills (in-house or contracted) to manage complex predevelopment issues of projects of this size and scale; mixed-use projects present financing complexity because federal subsidy streams are for housing only. • CDC spends more time with funder, articulating how to mitigate risks in urban markets for development of this scale and complexity (especially if mixed-use). • Urban location means that construction management, even staging of equipment, is more complex and more subject to contingencies; hiring contractors who have experience building density in urban environments is advisable.

Although we have been able to identify some characteristics of internal capacity for infill development, there is no "ideal" organizational and programmatic capacity that all CDCs

should strive to achieve. Rather, we find that **organizational capacity** (ability to manage, develop and lead staff and board) and **programmatic capacity** (ability to build and manage housing, human services and economic development programs) are contingent upon the housing product to be developed. Specifically, several CDCs interviewed indicated that they had indeed tailored their housing product to their staff and programmatic capacity, and vice versa:

> "We have six full-time staff and do about 20-30 units of housing each year. We would not be able to manage that volume with such a small staff if we did scattered-site development, so we develop most of our new homes in subdivision [greenfield] settings." (Executive director of a CDC based in the Southeast)

> "We do a lot in-house, like the design and construction management. It's more expensive on our payroll, but we're also able to cut development time by having people on staff. We want scale because we've invested a lot in our staff." (Executive director of a CDC based in the South)

Resource capacity, particularly the shortage of working capital, is a limiting factor for many CDCs undertaking infill development in so-called hot markets, where predevelopment costs are comparatively high. Working capital is used to finance predevelopment activities such as earnest money for site control/option, market studies, environmental studies and site planning. Working capital also represents the highest-risk expenditure in the development process, due to the fact that it is repaid only if a site is developed. While this risk is something that CDCs as well as for-profit developers face alike, CDCs have particular difficulty because there are few sources of working capital subsidy.

> "Something you need from the start is working capital. Establish a working capital fund so that you'll have earnest money to put toward sites and to do the due diligence, the environmental and market studies, to cover legal expenses, engineering, etc. These funds will be at risk and you must be able to accept a loss if the project does not prove feasible."

Furthermore, for CDCs that practice scattered-site infill development, there is an even bigger issue: the fact that due diligence on scattered sites is not a scalable activity. In other words, per-unit predevelopment cost does not decrease as the number of development sites increases; only when a CDC develops multiple homes on a single site would per-unit predevelopment cost decrease. Moreover, as mentioned above, in hot real estate markets, where CDCs must compete with nimble, well-capitalized private developers for the dwindling supply of high-cost infill sites, ready working capital is essential for a CDC. In recognition of the importance of working capital, to help overcome this hurdle intermediaries and municipalities have developed community loan funds, lines of credit, forgivable predevelopment loans, and other financial tools to assist CDCs and nonprofit affordable housing developers, particularly those operating in hot markets.

CDC intermediaries interviewed for this study also cited the importance of **network capacity** to the success of CDCs and affordable housing producers that take on higher-density and higher-volume development, whether infill or greenfield.

> "In [my city], we've seen CDCs shift from being single, scattered-site developers to being larger-scale, mixed-use developers, in part because the availability of single lots has diminished…As the industry shifts to larger-scale development and partnering with other organizations, CDCs need to develop the expertise to manage these projects and relationships." (Executive at a Midwest-based CDC intermediary)

For example, it is not uncommon for a CDC to be presented with a real estate opportunity and realize that it is not able to develop the property without either outside assistance or through building more internal **programmatic capacity.** This issue — of whether capacity should be developed in-house or whether a CDC should leverage capacity through partnership with other organizations — is not unique to infill. "Partnering to get the deal done" is a common practice in real estate development in general. Among CDCs, however, seeking outside development partners has yet to become a generally accepted practice, as explained by an executive from an affordable housing intermediary:

> "There is talk of CDCs partnering with private developers or regional CDCs to do real estate development. However, there is also a lot of pushback from CDC boards about partnering. I think that there's a strong feeling among boards that 'we need to do our own development'…I think CDCs hesitate to embrace the idea of private development partners for several reasons. First, they think that private partners will take advantage of them financially...and there's also the feeling 'they don't live here, so how can they understand our neighborhood's needs?'"

Even among nonprofit affordable housing developers, which are generally organizations with very strong real estate programmatic capacity, there are substantial benefits to partnering. These organizations often partner with private developers to achieve scale, to produce more units than they would otherwise be able to do alone, or to produce a housing typology, such as mixed-use, with which they have had no prior experience. The key to such a relationship is in the details, in the definition of roles, as explained by a for-profit developer:

> "In my experience as a for-profit developer partnering with a not-for-profit organization, the key to successful partnership is having a clear format. In our case, the [not-for-profit partner] had done an affordable development before and understood how to drive the tax credits…Generally, one or the other partner in a development should have significant experience in affordable development. The less ambiguity in the partnership, the better."

Intermediary organizations have recognized that partnering, particularly to achieve economies of scale in housing development, is an emerging trend in infill development in hot markets. They have also identified barriers to collaboration:

> "A few years ago, we recognized that when a CDC partners with another CDC or with a private developer to do larger development, there were costs associated with partnering, namely legal costs. So we established the Partnership Incentive Fund, to help organizations with the added costs associated with partnering. The grants cover the cost of drawing up the legal agreements and the cost of additional staff for administration of the partnership."

An outside development partner should not be seen as a substitute for strong internal real estate programmatic capacity at a CDC. While this point applies to all real estate development and not just to infill development, it is important to note that funders and financers of affordable housing development want to see expertise on all sides of a development partnership. An affordable housing funder interviewed for this study explained:

> "Anybody doing financing or lending on a deal looks at the strength of the entire development team. That includes the owner, contractor, architect, attorney, etc. From a financial risk point of view, we're looking at the strengths of each individual member of the development team and their track record. We need to know that they have experience in this type of development and can successfully do what they're proposing."

Another CDC intermediary suggested that one of the challenges faced by CDCs in growing real estate markets is "designing for infill," such as designing higher-density and lower-operating cost units. CDCs that have tended to focus on low-density, single-family production for decades may have only recently acknowledged that such low-density affordable housing production is no longer feasible, given current market conditions. The interviewee explained:

> "What many CDCs don't have is the capacity to really design for affordable housing infill. How do we design for increased density while also making it a quality project? I think there is an opportunity for [our intermediary] to pay for the extra design work required."

9.0 Findings and Implications

The surveys and interviews we conducted yielded a tremendous amount of information, sometimes disparate and sometimes indicating definite trends, regarding both CDC-led real estate development and CDC-led infill development. In this study, we have attempted to distinguish between the two, sorting out that which relates to infill development and that which relates more generally to real estate development. We were able to identify five key findings, discussed below, which we hope will assist community development practitioners, as well as intermediaries, funders and municipalities, to better grasp the concept of infill, better assess their contexts of operation, and ultimately to conceptualize how they might reduce risk and optimize gain associated with infill development. In addition, in Figures 22 and 23 we summarize recommendations from infill practitioners and from intermediaries.

Finding #1: A majority of community developers perceive infill to be single-home, scattered-site affordable housing development; in reality, CDCs practice infill development on varying scales, to achieve a variety of objectives.
This study has found that among CDC practitioners, there is wide variation in scale, volume and intended outcomes of infill development. On the one hand, many CDCs view infill development as a means to revitalization rather than as an affordable housing strategy per se. This would explain why many smaller, place-based CDCs practice single-family, scattered-site development in spite of the fact that this type of development is relatively inefficient financially and can cost small organizations dearly in terms of staff time and expensive contingencies. They contend that by replacing "blight" with single-family homes, block by block, neighborhoods will stabilize or, better yet, attract additional residents, businesses, and, ultimately, broader economic opportunities. On the other hand, larger CDCs and regional nonprofit affordable housing producers in hot real estate markets view infill development primarily as an affordable housing strategy, generally because infill sites "are all that are left" and because their city or metropolitan area has a shortage of affordable housing. This objective informs their infill practice: these organizations generally practice dense, high-volume infill, sometimes combining housing with retail or other typologies, in order to achieve economies of scale, minimize per-unit development costs, and optimize developer fees. An implication of this point for practitioners and intermediaries is that dialogue about infill should begin with a discussion of what each party means when they talk about infill, as we explain further below.

Finding #2: Negative perceptions cloud CDC-led infill development; framing the issue around objectives, scale and density can yield productive discussion and decision-making.
To a majority of community development practitioners, the term "infill" is synonymous with development that is low-scale and low-volume, and has high per-unit costs. In fact, many practitioners and intermediaries perceive CDC-led infill development negatively, as costly and complex. In the course of this study, we found that the negative perception associated with CDC-led infill affordable housing development had more to do with low-scale, low-volume affordable housing production, with little consideration of efficiency or effectiveness, and less to do with the fact that development occurred on an infill site, which is simply a site closely bounded by existing structures. We also found that this narrow definition and negative perception could preclude meaningful discussion of infill development.

Practitioners and intermediaries may want to address the discrepancy between the negative perception of CDC-led infill development and the reality that CDCs practice infill development on a variety of scales and densities to achieve diverse outcomes. Specifically, we propose that the first question that a CDC practitioner might ask is not "How do we develop this infill site?" but rather, "What are we hoping to achieve? What is our desired outcome? Affordable housing production? Revitalization?" If real estate development is a means to that goal, then a place-based CDC might proactively identify its infill stock, and then ask, "What density or volume of production is financially feasible as well as appropriate to our market and context?" And, further, "Should we invite a private partner to develop this site or should we develop it on our own, based on our internal capacity?"

After identifying these objectives and asking these types of questions, a CDC might actually find that infill development on the scale at which they are capable is neither financially feasible nor advisable, within a market or municipal context. We concede that this realization may prove difficult for some CDCs to adopt because their legitimacy may be closely tied to development of a specific neighborhood or even of a specific infill parcel; these organizations may feel that they have no choice about where or whether to do infill development. However, given the changing context of community development, in which subsidies for development are dwindling and CDCs are under increasing pressure to achieve financial sustainability, CDCs might be well served to apply this kind of scrutiny to their infill development decision-making.

Figure 22: Advice from Infill Practitioners to Infill Practitioners

Top Ten List: What Works in Infill Development
1. "Building affordable but having a for-profit mentality, from conception to completion."
2. "The ability to articulate why a deal works."
3. "Being able to walk away from a project if due diligence reveals that it won't pencil out."
4. "Paying attention to the market."
5. "Building in areas where other reinvestment is taking place."
6. "Understanding your capacity and market, developing product suited for both, and then sticking to it."
7. "Designing for infill by doing the numbers on density, energy cost, maintenance cost, etc."
8. "Understanding the threats to affordability throughout the development process."
9. "Understanding what it's going to take for adjacent homeowners to tolerate infill development."
10. "Working capital for predevelopment costs."

Finding #3: Market matters; hot-market and cold-market infill developments require different approaches.

Not surprisingly, this study finds significant differences between infill development practices of CDCs at both ends of the real estate market spectrum, in so-called weak or "cold" market cities and in strong or "hot" real estate markets. In terms of affordable housing, the nature of the crisis in a weak market is not a shortage of land or housing, but involves weak demand, low housing values, poor housing conditions, high vacancy rates and widespread abandonment, and/or declining neighborhood stability and quality of life. The challenge to CDCs in weak markets is to preserve value and, in some cases, to re-create value by enticing residents and businesses back to the neighborhood.

In strong or "hot" market cities, where the housing shortage is chronic at all levels of affordability, preservation of housing affordability is the challenge. CDCs and nonprofit affordable housing developers must compete with private developers who can "pay more and pay now" for increasingly scarce infill sites. Thus site acquisition costs in hot markets are significantly higher — in some cases, prohibitively higher — than in weak or soft markets. CDCs and intermediaries are well aware of the implications of this point: as the risks and rewards in each market may be different, the objectives, strategies, and innovations in these markets may be distinct as well. Not unlike for-profit real estate developers, community development practitioners engaged in infill development are most successful when they understand their market, capacity and context intimately, and they adapt development to these strengths.

Figure 23: Recommendations from Intermediaries and Municipalities

Top Five List: Ways to Support CDC-led Infill Development
1. Emphasize data-driven real estate decision-making. Supply tools that enable CDCs to better understand their existing portfolios, learn from past experience and evaluate project expectations and future performance (Intermediary).
2. Encourage "designing for infill" by adopting infill-conducive building codes (Municipality) and funding additional, infill-specific design work (Intermediary).
3. Address site-acquisition cost and complexity by introducing parcel assembly and strategic land banking programs (Municipality).
4. Promote larger-scale infill development through tax incentives or abatement (Municipality).
5. Encourage place-based CDCs to be proactive in identifying infill sites and potential uses through funding for neighborhood planning (Intermediary and Municipality).

Finding #4: Municipal context can make or break development feasibility.
At both extremes of the real estate market, we found that CDCs are having an increasingly difficult time developing affordable infill housing, and in some cases have abandoned infill housing development altogether. In hot markets, for example, the affordability gap between development cost and an affordable rent or mortgage is the issue. Unless the CDC is operating in a supportive municipal context, with a city that will subsidize land acquisition costs, permit increased densities, and/or abate property taxes, infill development projects may never "pencil out," or may never yield reasonable developer fees while producing affordable units, and thus cannot be pursued. It follows that an affordable housing-focused CDC operating in an unsupportive municipal environment in a hot market should focus on influencing its municipal context, such as through community organizing, before pursuing infill development.

Similarly, a CDC in a weak market may find that infill housing is not an optimal approach to community revitalization at the current time because, for example, there is little demand for infill housing in areas that lack other types of reinvestment or because the city government is not committed to taking a comprehensive approach to neighborhood reinvestment. Stand-alone infill affordable housing development is neither a viable nor a sustainable revitalization strategy in a weak market.

There are two implications of this point for community development practitioners. First, municipal government can determine the fate of an infill development: if a CDC seeks to do

infill development, it is in its best interests to engage its municipality early in the process. Second, practitioners should be open to the possibility that infill development in the present circumstances may not serve their needs or be in the best interests of the communities they serve.

Finding #5: Scale matters, especially to organizations seeking to become financially sustainable.

For some time, CDCs have been reminded of the need to become more "sustainable." Typically, that has meant raising more resources through grants or other funding sources. Now, however, there is increasing pressure on CDCs to reach sustainability not through grants but by developing income streams to cover more of their annual operating budgets. Examples of income streams are fees from real estate development, steady income from rental property management, and profits from sales of homes. "Traditional" infill affordable housing development presents significant challenges to organizations that are trying to become financially sustainable, because low-scale, low-volume housing production is staff-intensive (greater per-unit overhead cost) and costly (greater per-unit development cost) when compared to higher-scale, higher-volume development. In short, low-scale, low-volume infill development is relatively inefficient at a time when CDCs can ill afford to be inefficient in their resource and staff allocations. CDCs need to evaluate infill development opportunities not simply in tactical terms ("Is this scale of development feasible, from the financial, market, and capacity points of view?") but also strategically, in the context of the larger issue of organizational financial sustainability, taking a portfolio perspective by asking what mix of real estate developments will enable the organization to reach sustainability.

10.0 Conclusions and Future Research

This study attempts to affirm, document, and organize the knowledge and experience of community-based practitioners of infill housing development. While this research is a reflection of numerous in-depth interviews and thus provides a qualitative analysis of infill practices of a segment of CDCs (NeighborWorks® organizations), more study is necessary to better understand the factors associated with infill development and the types of impact it has.

We have observed that infill affordable housing development is an intermediate output of the community development system rather than an end-goal or outcome per se. Rarely is the objective or goal of CDC-led infill development simply to build homes for low-income individuals; rather, community development practitioners aim through infill development to revitalize a neighborhood, avert gentrification and preserve affordability, among other objectives. But how effective are community-based organizations at promoting these outcomes through infill development? In particular, we suggest that researchers compare infill development initiatives to other initiatives and ask questions such as, "How do we measure the efficacy of infill development in combating blight and spurring revitalization?" and "Is infill a more effective approach to community revitalization than its alternatives?"

A second observation is that infill development is really about scale. Producing affordable housing on a scale and in a volume that minimizes per-unit development cost, returns a reasonable developer fee to the CDC, and optimizes staff or partner capacity is a key to success in hot or growing real estate markets. In the course of this study we found significant resources addressing zoning for infill and building codes for infill, but few studies on the topic of "designing for infill affordable housing." Of particular interest to community development practitioners would be an outline of the principles and costs associated with designing for infill, from a community development perspective.

Finally, and most importantly, we observed that for a majority of organizations, primarily urban and place-based CDCs, infill development is their only choice for housing development. For these CDCs, infill development is about "patching the fabric of the neighborhood" by developing vacant lots and abandoned homes one by one, and thus represents their commitment to neighborhood revitalization. However, in the context of ever-scarcer resources and the emphasis on organizational sustainability, these CDCs, particularly those at either extreme of the real estate market spectrum, can ill afford to practice infill development on this scale much longer. It is obvious that sustainability, and the role that real estate development and infill development, in particular, may play in the issues involved in sustainability, is part of a much larger debate in the field of community development and deserves closer study.

Interviews

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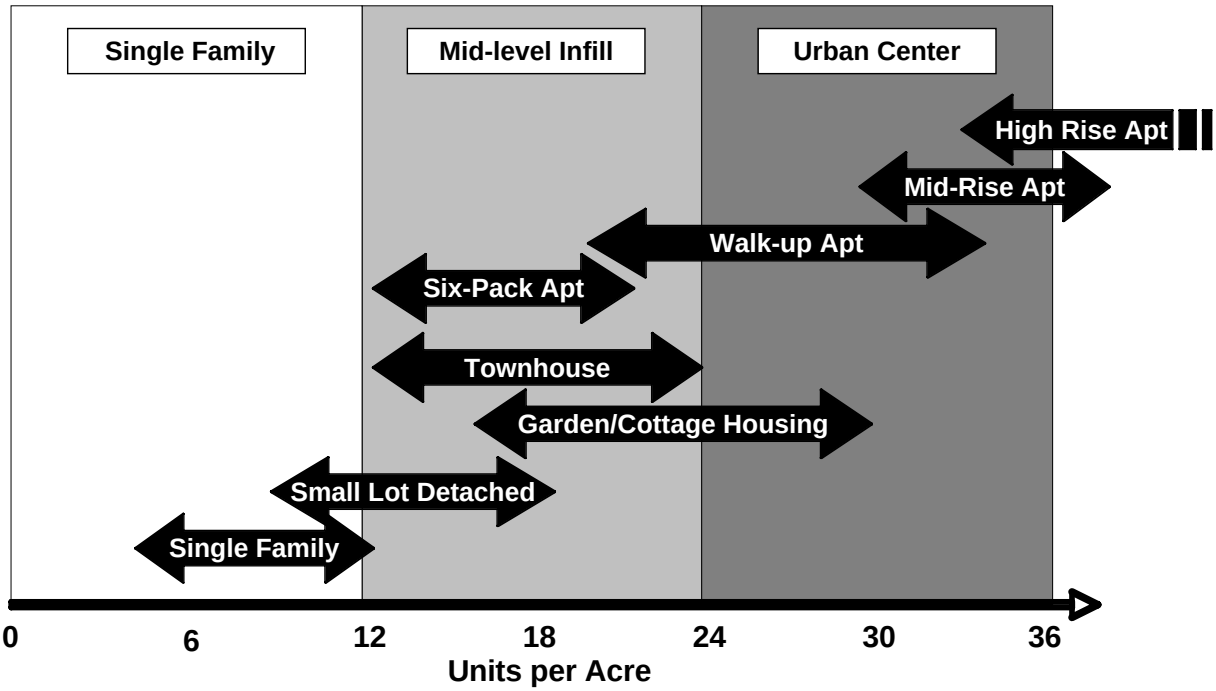
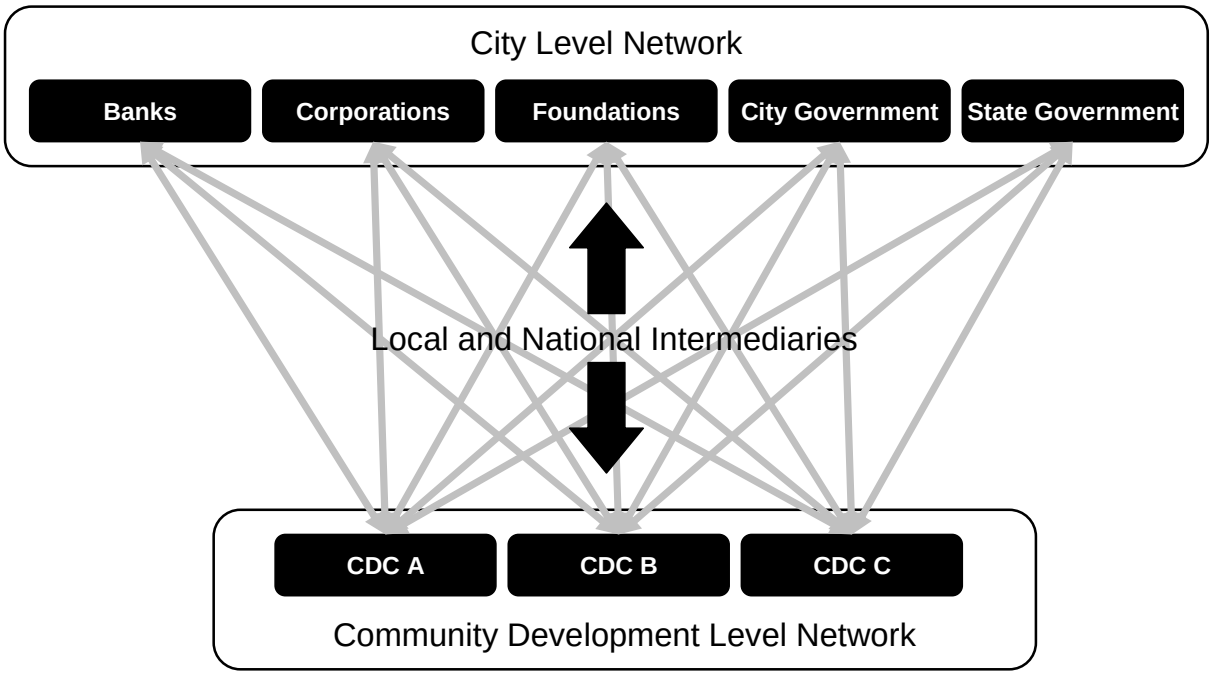
Appendix A: Infill Housing Typologies and Densities



Source: *Filling in the Spaces: Ten Essentials for Urban Infill Housing,* 2003.

Appendix B: The Function of Intermediaries in the Community Development System



Source: Modified from Vidal and Keyes, 2005.

Appendix C: Real Estate Market Contexts for Infill Housing Development

	Strong Market Context	Weak Market Context
Definition	Rate of home price increase significantly outpaces household income growth.	Average home price unchanging or growing slowly relative to the U.S. average.
General Characteristics	Population growth; low vacancy rates; scarcity of developable property; escalating property values; high development costs; gentrification and/or displacement of low- and moderate-income households.	No significant new population growth; large tracts of vacant and/or abandoned property; stagnant home prices in some neighborhoods; old housing stocks; high rates of vacancy and foreclosure.
Affordability Characteristics	Affordable housing shortage at all levels, from very-low-income households (earning less than 30% of area median income, AMI) to moderate–income, "workforce" households (earning 80–120% of AMI).	Affordable housing shortage concentrated at extremely low-income (earning less than 30% of AMI) and very low-income households (earning 30–50% of AMI); housing stock at low- and moderate-income levels may be of poor quality.

Appendix D: Characteristics of the NeighborWorks® Network and NeighborWorks® Organizations (NWOs)

	2003	2004	2005
NWO member organizations	219	220	232
Median annual NWO operating expense	$1,231,976	$1,279,362	$1,496,381
Median size of NWO staff	10.5	11.5	12.9
% NWOs with real estate business lines	n/a	n/a	77.5%
Number of new homeownership units produced	802	661	1120
Number of new multifamily units produced	756	332	1259

Source: NeighborWorks® America.

Appendix E: Infill Survey Responses

1. Please read the definition below and tell us what best describes your organization's activities: "Infill housing refers to new residential development on vacant, abandoned, and underutilized property within built up areas of existing communities, where infrastructure is already in place." "Greenfield residential development refers to new housing through subdivision of previously undeveloped land that is not bounded by existing communities."

	Response Percent	Response Total
We do infill housing development only	**46.9%**	**46**
We do greenfield housing development only	2%	2
We do both infill and greenfield development	42.9%	42
We do not do any real estate development	5.1%	5
Previously, we did infill housing development but have since stopped doing infill	3.1%	3
Total respondents		**98**
Skipped this question		0

2. If your organization practices infill housing development, please tell us what type of development your organization practices. Please select all that apply.

	Response Percent	Response Total
Residential — homeownership only	40%	34
Residential — rental only	15.3%	13
Residential — both homeownership and rental	**42.4%**	**36**
Mixed-use — residential, commercial, retail and/or community uses	31.8%	27
Other (please specify)	3.5%	3
Total respondents		**85**
Skipped this question		13

3. NeighborWorks is interested in learning about the typical scale of infill development. Please tell us what the minimum number of contiguous housing units your organization will consider for development on an infill site (choose one).

	Response Percent	Response Total
We will develop a site that will accommodate just one (1) housing unit	**56.5%**	**48**
We require a site large enough for at least 2-5 housing units	16.5%	14
We require a site large enough for at least 5-10 housing units	7.1%	6
We require a site large enough for at least 10-20 housing units	9.4%	8
We require a site large enough for more than 20 housing units	10.6%	9
Total respondents		**85**
Skipped this question		13

4. Would your organization consider small-scale development (1–5 unit) on scattered parcels throughout a neighborhood?

	Response Percent	Response Total
Yes	**85.9%**	**73**
No	14.1%	12
Total respondents		**85**
Skipped this question		13

5. Please tell us how many infill housing units your organization has developed annually over the past five years.

	Response Percent	Response Total
We typically develop less than five (5) housing units per year	**35.3%**	**30**
We typically develop 5–10 housing units per year	22.4%	19
We typically develop 10–20 housing units per year	16.5%	14
We typically develop 20–30 housing units per year	16.5%	14
We typically develop more than 30 housing units per year	9.4%	8
Total respondents		**85**
Skipped this question		13

6. In your experience over the last five years, how does the cost of doing infill compare to the cost of doing greenfield development, in terms of total development cost per unit?

	Response Percent	Response Total
Infill development costs are typically cheaper than greenfield development costs	**18.8%**	**16**
Infill development costs are approximately the same as greenfield development costs	11.8%	10
Infill development costs are typically 5% more than greenfield development costs	1.2%	1
Infill development costs are typically 10% more than greenfield development costs	11.8%	10
Infill development costs are typically 15% more than greenfield development costs	8.2%	7
Infill development costs are typically 20% more than greenfield development costs	3.5%	3
Not applicable because we do only infill development and thus have no basis for comparison	**44.7%**	**38**
Total respondents		**85**
Skipped this question		13

7. How do you typically acquire infill sites?

	Never	Rarely	Some-times	Fre-quently	Always	N/A	Response Average
We purchase sites from private owners	1% (1)	8% (7)	23% (19)	**52% (44)**	14% (12)	1% (1)	3.71
We receive sites at no cost from local government	36% (30)	29% (24)	20% (17)	12% (10)	1% (1)	2% (2)	2.12
We purchase tax-delinquent or foreclosed sites from the local government at a reduced price	31% (26)	19% (16)	30% (25)	14% (12)	1% (1)	5% (4)	2.33
We purchase tax-delinquent or foreclosed properties from the local government at market price	39% (33)	25% (21)	25% (21)	5% (4)	2% (2)	4% (3)	2.02
We purchase sites from the local land bank	65% (55)	12% (10)	10% (8)	2% (2)	0% (0)	11% (9)	1.43
We lease sites from a community land trust	80% (67)	6% (5)	1% (1)	0% (0)	0% (0)	13% (11)	1.10
					Total respondents		**84**
					Skipped this question		14

8. Please tell us which of the factors listed below constrain your ability to develop more residential infill in your neighborhood.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A	Response Average
Acquiring foreclosed sites is complex and costly in my city	7% (6)	17% (14)	28% (23)	27% (22)	10% (8)	12% (10)	3.16
Finding sites at a reasonable cost is difficult due to market conditions and competition from private developers	2% (2)	11% (9)	5% (4)	36% (30)	**46% (38)**	0% (0)	**4.12**
Available federal subsidies (CDBG, HOME, etc) are insufficient to finance the project	1% (1)	11% (9)	19% (16)	**41% (34)**	**24% (20)**	4% (3)	**3.79**
Finding general contractors willing to work on infill development is difficult	17% (14)	34% (28)	11% (9)	30% (25)	7% (6)	1% (1)	2.77
Construction costs in my market are extremely high	4% (3)	5% (4)	22% (18)	**40% (33)**	**30% (25)**	0% (0)	**3.88**
Joint venture partners, especially financial partners, are difficult to find	6% (5)	31% (26)	19% (16)	27% (22)	6% (5)	11% (9)	**2.95**
Managing construction on multiple scattered sites is complex and costly	2% (2)	13% (11)	16% (13)	**47% (39)**	**20% (17)**	1% (1)	**3.71**
Obtaining necessary permits from local government is complex and costly	12% (10)	24% (20)	18% (15)	29% (24)	16% (13)	1% (1)	3.12
Existing residents of underutilized properties slated for infill development will be displaced, adding cost and complexity	13% (11)	23% (19)	19% (16)	36% (30)	4% (3)	5% (4)	2.94
Political/community opposition to increased density is a problem	12% (10)	23% (19)	17% (14)	30% (25)	16% (13)	2% (2)	3.15
Demand for infill residences is insufficient	34% (28)	48% (40)	11% (9)	6% (5)	0% (0)	1% (1)	1.89
My organization lacks the internal capacity to manage the complexity of infill	36% (30)	45% (37)	8% (7)	5% (4)	4% (3)	2% (2)	1.93
					Total respondents		**83**
					Skipped this question		15

9. Please tell us which of the factors listed below enable you to develop more residential infill in your neighborhood.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A	Response Average
Access to reasonably priced sites	7% (6)	12% (10)	5% (4)	**32% (26)**	**44% (36)**	0% (0)	**3.93**
Lower cost of construction	6% (5)	20% (16)	11% (9)	35% (29)	27% (22)	1% (1)	3.58
Additional local government support in the form of provision of land or infrastructure	1% (1)	7% (6)	11% (9)	**38% (31)**	**39% (32)**	4% (3)	**4.10**
Additional local government support in the form of low-cost financing or grants	1% (1)	9% (7)	7% (6)	**45% (37)**	**35% (29)**	2% (2)	**4.08**
Political/community support for increased density	2% (2)	17% (14)	24% (20)	39% (32)	15% (12)	2% (2)	3.48
Availability of adequate modular or other types of pre-fab, lower-cost housing options	4% (3)	23% (19)	30% (25)	21% (17)	9% (7)	13% (11)	3.08
Reliable joint-venture partners	4% (3)	13% (11)	21% (17)	41% (34)	15% (12)	6% (5)	3.53
Better internal organizational capacity for real estate development	2% (2)	13% (11)	18% (15)	**43% (35)**	**23% (19)**	0% (0)	**3.71**
						Total respondents	**82**
						Skipped this question	16

10. If you answered "we have stopped doing infill development" to Question 1, then please tell us why your organization stopped doing infill development (please check top three reasons):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A	Response Average
All sites in service area developed	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	0% (0)	2.0
Sites available but land price too high	0% (0)	0% (0)	33% (1)	0% (0)	**67% (2)**	0% (0)	**4.33**
Insufficient demand for infill housing	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	0% (0)	2.0
Subsidies for infill insufficient	0% (0)	0% (0)	0% (0)	**33% (1)**	**67% (2)**	0% (0)	**4.67**
Infill dev. exposed the org. to too much financial risk	0% (0)	0% (0)	33% (1)	67% (2)	0% (0)	0% (0)	3.67
Infill development was too complex given our org. capacity	33% (1)	33% (1)	33% (1)	0% (0)	0% (0)	0% (0)	2.0
Our organization ceased all real estate dev. operations	0% (0)	33% (1)	0% (0)	0% (0)	33% (1)	33% (1)	3.5
					Total respondents		**3**
					Skipped this question		95

11. Are there any other reasons why your organization stopped doing infill development?

Total respondents	**2**
Skipped this question	96

12. My position at this organization is (check one):

	Response Percent	Response Total
Executive Director	**76.1%**	**70**
Deputy Director	2.2%	2
Chief Operating Officer	2.2%	2
Director of Real Estate Development	9.8%	9
Other (please specify)	9.8%	9
Total respondents		**92**
Skipped this question		6

13. Please tell us about your organization's real estate operations: Please select all that apply.

	Response Percent	Response Total
We have director of real estate development	**46.7%**	**43**
We have a real estate committee on our board of directors	**53.3%**	**49**
We hire outside real estate advisors	37%	34
We have more than two full-time staff engaged in real estate development	**44.6%**	**41**
We have a licensed general contractor in-house	23.9%	22
We have a construction manager in-house	**52.2%**	**48**
We do not have any real estate operations	2.2%	2
Other	19.6%	18
Total respondents		**92**
Skipped this question		6

14. Which sentence below describes the housing market in which you operate?

	Response Percent	Response Total
The housing market is hot (housing demand outpaces supply, home have appreciated steeply)	**67.4%**	**62**
The housing market is cold (demand for new housing is flat, high foreclosure rates)	13%	12
Other (please specify)	19.6%	18
Total respondents		**92**
Skipped this question		6

15. Would you like to receive an invitation to the "Infill Housing Focus Group" to be held on August 15, 2006, at the NeighborWorks Training Institute in Washington, D.C.?

	Response Percent	Response Total
No, please do not send me an invitation	56.5%	52
Yes, please send me an invitation. My contact information (name, e-mail) is as follows:	43.5%	40
Total respondents		**92**
Skipped this question		6

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