Redevelopment of Brownfields

Strategy description

Brownfields are sites, often vacant or underutilized, that either are or are perceived to be contaminated. They may be old industrial sites or commercial sites like gas stations and dry cleaners. The real or perceived environmental contamination complicates expansion or redevelopment because of testing and clean up that may be necessary to ensure the safety of the site, as well as the liability that may remain even after remediation. However, recent changes in federal law relating to liability have improved opportunities for state and local governments to reuse brownfields.

Cities and states have taken several approaches to encouraging use of brownfields for affordable housing or mixed-use development that includes housing. These approaches include taking ownership of sites and working with developers, providing funding for clean-up, either directly or through tax credits, changing zoning to permit compact mixed-use development, and waiving development fees.

By one estimate, there are approximately 450,000 to 600,000 brownfields in the United States, ranging from large industrial sites to small abandoned gas stations and dry-cleaners.

History of the strategy

Brownfield redevelopment has existed for a number of decades. A 1980 federal law, known as the “Superfund,” attempted to address the issue of liability by making the current owner liable for cleanup costs. This had the possibly unintended effect of increasing the risk of acquiring brownfields for redevelopment and discouraging their reuse. Then, in 1995, the U.S. Environmental Protection Agency launched the Brownfields Economic Redevelopment Initiative to provide grants for projects and clarify liability and cleanup issues, among other things. This encouraged new brownfields redevelopment activity in the 1990s.

Target population

- Residents of urban areas and older suburbs may benefit from the removal of hazards and the redevelopment of sites that may be abandoned and unsightly.
- Affordable housing units created by brownfields redevelopment are generally targeted to low- and moderate-income households.

How the strategy is administered

Brownfields can be redeveloped by local or state governments, by non-profit or for-profit developers, or by a partnership that includes a combination of these groups. In addition to these participants, lenders, inspectors, and other community stakeholders may be involved in the process:
• First, brownfields with potential for redevelopment are identified. Individual developers, state and local governments, and other interested stakeholders may be involved.

• Second, a detailed plan for acquisition, remediation, and development is prepared, and regulatory agencies are involved in approving the plans.

• Third, the site is remediated and prepared for construction and construction begins.

**How the strategy is funded**

- The Environmental Protection Agency, the U.S. Department of Housing and Urban Development, the Department of Commerce, and the Treasury Department offer a number of federal financing tools. Federal incentives for private investment in brownfields redevelopment include the Community Reinvestment Act, Industrial Development Bonds, Rehabilitation Tax Credits, and tax-deductible land donations.

- Several states provide loans and grants for brownfields redevelopment. For example, California’s CalReUSE offers forgivable loans for site assessment and remediation.

**Extent of use of the strategy**

Brownfields redevelopment is a moderately used strategy across the U.S. It is used both by states and by localities, although not necessarily for affordable housing.

**Locations where the strategy is being used**

- In Trenton, NJ, the city worked with the owner of a closed factory to redevelop the site for light industry and senior housing. Seventy affordable senior housing apartments were constructed on the site.

- In 1987, the Portland (OR) Development Commission purchased The Yards at Union Station, an abandoned train station, to create a high-density, mixed-use infill project near downtown. The remediation cost of The Yards was $2.65 million, out of a total development cost of $57 million.

- Brownfields laws in Michigan encourage redevelopment of previously contaminated properties. Michigan law protects owners from liability for existing contamination that they did not cause, and requires cleanup based on the intended land use, so that industrial sites do not have to meet the same standards as residential sites. The laws also allow communities to establish Brownfields Redevelopment Authorities that are authorized to use tax increment financing districts and tax credits to encourage investments in brownfields redevelopment areas.

- Firms in New York and California are looking at sites in each state for possible brownfield redevelopment investments that have the potential to produce 600 units of affordable housing.
Strategy results

The Yards, in Portland, has produced 479 housing units, the majority of which are reserved for low-income households. In March 1998, 158 units of housing were completed. Forty percent of these were reserved for households earning up to 60 percent of median income, and the rest were sold at market value. In January 2000, another 321 apartments were finished. Half of these units were reserved for households earning less than 50 percent of median income, and half for those earning less than 60 percent.16

Pros and cons to using the strategy

Pros:
- Brownfields redevelopment has the potential to replace an unsafe eyesore with a development that helps meet community affordable housing and other needs.
- Brownfields are often large plots of land that can provide ample space for development of many homes.
- Brownfields are typically located in close proximity to existing infrastructure, transportation routes, and labor pools.
- Brownfields redevelopment encourages reuse of urban land.

Cons:
- Sites are potentially hazardous and, even after clean up efforts are made, potential dangers may still exist. The ongoing actual or perceived hazard creates permanent liability issues, particularly with the lending organizations involved.
- Significant public and/or private up front investment is required to clean up and inspect a site.
- Prolonged legal battles are usually necessary to get the original owner to agree to clean up the site.
- Redevelopment can be a very long process involving resolution of legal issues, testing and clean up, and actual development.

Sources of information about the strategy

• Western Pennsylvania Brownfields Center website:
  http://www.cmu.edu/steinbrenner/brownfields/index.html

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## Adaptive Reuse of Underutilized Buildings

### Strategy description

More intense use of underutilized buildings, some of which have outlived their original purpose, is one strategy towns and cities are using to create affordable housing. Old schools, military bases, and nursing homes have all been adapted for use as affordable housing. In addition, in town centers, buildings often have second and third stories that are underused. Several communities and states actively encourage their use as affordable housing by relaxing zoning requirements, providing limits on property taxes, and offering low-interest loans for rehabbing space for residential use.

### History of the strategy

Adaptive reuse was first introduced as a result of growing concern for the environment arose in the 1960s and 1970s. Ghirardelli Square in San Francisco is considered the first successful adaptive reuse of an industrial complex. Since then, the concept has been adopted for use in creating affordable housing.

### Target population

Adaptive reuse projects that include affordable units target low- and moderate-income renters and homebuyers.

### How the strategy is administered

At present, zoning in most jurisdictions does not allow for residential or commercial uses in industrial buildings. Solutions include the creation of mixed-use zones, special preservation districts, form-based codes, or zoning review procedures for adaptive reuse.

Complying with building codes is probably the biggest challenge when considering an adaptive reuse project. Standard codes are primarily intended for new construction and offer few exceptions for rehabilitation. In many cases, historic buildings pre-date existing building codes and thus are probably not in full compliance. Adopting alternative building codes for rehabilitation projects can reduce regulatory complexity and encourage adaptive reuse. Recent studies have found that adopting a rehabilitation code can cut costs for historic rehabilitation by up to 50 percent.35

State and local officials can offer additional incentives, which may include:

- Waiving density restrictions
- Limiting or waiving parking restrictions
- "Grandfathering-in" nonconforming floor areas, setbacks, and heights, which removes the required approval of a variance;
- Allowing mezzanines to be added without considering the added space as new floor area
- Waiving loading space requirements

**How the strategy is funded**

In many cases, rehabilitating non-residential structures for use as affordable housing can be less costly to developers than constructing new affordable housing. Financing may include federal Low-Income Housing Tax Credits, state and federal historic tax credits, other government sources of financing, and developer equity.

**Extent of use of the strategy**

Moderate use.

**Locations where the strategy is being used**

- Los Angeles, CA adopted the Adaptive Reuse Ordinance, which allows underutilized commercial buildings to be converted into apartments, condominiums, artists' lofts, and live-work spaces. The program works by streamlining the approval process for developers while relaxing parking, density, and other zoning ordinances. Based on many successful projects in the downtown area, Los Angeles expanded the program to cover areas of Hollywood, Mid-Wilshire, Koreatown, Chinatown, Lincoln Heights, and Central Avenue.

- New Jersey adopted a subcode that recognizes six types of projects involving existing buildings; repair, renovation, alteration, reconstruction, change of use, and addition. The rules that apply to a change of use depend on the level of hazard or safety requirements imposed by the change.

- Lexington, MA, converted a former high school into Muzzey High Condominiums in 1985. The building contains 70 affordable units, 12 of them rental.

**Pros and cons to using the strategy and/or types of markets where the strategy is more or less effective**

Cities that were former industrial centers are more likely to have an abundance of suitable vacant buildings for reuse as affordable housing than other cities. However, many cities have school buildings, warehouses, and upper stories of town center retail buildings that may be reused as affordable housing.

**Pros:**

- Adapting old buildings for use as affordable housing directly increases the number of affordable housing units.

- Reusing old buildings rather than constructing new development makes efficient use of resources.
- Adaptive reuse can improve the neighborhood environment by rehabilitating a building that may previously have been a neighborhood eyesore. It may also encourage other types of new development.

- Many adaptive reuse projects are located in close proximity to the downtown area, employment centers, and public transportation.

**Cons:**
- Contamination from decades of industrial activity prior to the passage of hazardous substance regulations may present significant barriers to the adaptive reuse of historical industrial buildings.
- A finite number of buildings are available for reuse as affordable housing, so adaptive reuse typically must be used with a variety of other strategies to produce significant numbers of affordable housing units.

**Sources of information about the strategy**

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## Infill Development

See also Reusing Vacant or Abandoned Property for Affordable Housing, Vacant Building Registry (in Other Strategies)

### Strategy description

Infill development takes advantage of empty lots, underused or vacant buildings, and other property within existing urban areas, often for affordable housing. Infill development can benefit from public utilities and other infrastructure that is already in place, reducing the cost of housing construction.

### Target population

The target population for infill development varies; however, generally infill development involves single-family homes and small multifamily developments because it can be difficult to find large enough parcels for more sizeable developments. Infill development specifically for affordable housing is targeted primarily to low- and moderate-income renters and homebuyers.

### How the strategy is administered

Developers must obtain the necessary permits to conduct infill development; local governments may encourage infill development by streamlining this process, waiving impact fees (see Graduated Impact Fees for Infill Development), providing subsidies, or other strategies.

### How the strategy is funded

Most infill development is self-funded by developers, but the locality may provide at no or low costs properties acquired through tax foreclosure or code enforcement and may reduce or waive impact fees or assist with provision of infrastructure.

### Extent of use of the strategy

Widely used throughout the country.

### Locations where the strategy is being used

- The Midtown neighborhood of St. Petersburg, FL, has 3,000-4,000 vacant lots, along with 300-500 boarded up buildings. The city acquires properties through code enforcement and demolition, and offers them for sale to nonprofits at a discounted price to encourage development. The city is working to revise zoning regulations to speed the pace of infill development. Regulations established in the 1970s require lots with 75-foot frontage, but homes in older areas of the city have 50-foot frontages. Developers will no longer be required to obtain zoning variances to build new houses in areas such as Midtown with smaller lots, or to acquire two lots to build one house.
Phoenix’s Infill Housing Program was established in 1995 to encourage development of single-family owner-occupied housing on vacant or underutilized land within the “mature” portions of Phoenix. Incentives for builders include Development Occupation Fee waivers for water and sewer, both worth $600 per unit; city aid for off-site improvement costs for qualifying projects; blight control adjacent to infill sites; and expedited review processes.

In 1997, the Downtown Partnership launched the Downtown Housing Initiative, which sought to revitalize the Howard Street portion of downtown Baltimore. Through various redevelopment incentives, including state-sponsored short term financing to convert downtown commercial buildings to housing; deferred or reduced property taxes; and contributions from the city toward streetscape improvements, the city has begun to revitalize a once vibrant downtown shopping district. Over 400 housing units had been completed or were underway by 1999.

Sacramento’s Vacant Lot Development Program was tested as a pilot program in the Oak Park and North Sacramento neighborhoods beginning in 2002. Infill development was a cornerstone of the strategy, which sought to address the long-term difficulties associated with vacant lots, low owner-occupancy rates, and the lack of large homes in certain Sacramento communities. An initial allocation of $200,000 by the county of Sacramento was used for the construction of six four-bedroom homes and two three-bedroom homes.

Seattle’s Central Area Development Association used a combination of infill and mixed-use development, and a citywide housing levy to revitalize the business areas of the Central Area portion of Seattle, in part by providing additional affordable and market-rate units. One of the major projects, Welch Plaza, was built on the former site of a neighborhood hardware store. CADA partnered with a private real estate development company to complete the approximately $27 million project, which included 162 apartments, 48 percent affordable, and 18,000 square feet of ground floor retail and commercial space.

Once a site full of dilapidated industrial buildings, Emeryville, CA has used a variety of infill development strategies to transform itself into one of the San Francisco Bay Area’s most successfully redeveloped areas. Between 1995 and 2000, the city built 561 apartments, lofts, townhouses, and condos, 224 of which were classified as affordable for low and moderate-income families. Surrounding the homes are a wide variety of retail shops and other commercial developments, including office space. The city has adopted a variety of inclusionary zoning ordinances and has used tax-increment financing to fund many of the redevelopment efforts. The city was also selected by the EPA to participate in a brownfields cleanup program. One element of the program was the creation of an online “One-Stop-Shop” where landowners, developers, residents, and other interested parties can access land use zoning, property ownership, and environmental information on any parcel within the city (see case study).
### Strategy results

- In St. Petersburg, FL, the number of vacant and boarded properties in the Midtown neighborhood decreased 50 percent between 1998 and 2001 and has been further reduced since then.

- Denver has made substantial efforts at generating housing units through infill development throughout the metropolitan area, including 7,283 units completed, 2,203 units under construction, and 7,059 units planned for development.

### Pros and cons to using the strategy

#### Pros:

- Useful in urban areas such as downtowns, economically depressed neighborhoods, transit corridors and locations near employment, shopping, recreational and cultural centers.

- Promotes efficient use of land in existing communities.

#### Cons:

- Since vacant land parcels are often scattered and spread out, opportunities to build more than one housing unit at a time are relatively uncommon.

- Constructing new buildings or rehabilitating existing buildings that are connected to already existing buildings can be difficult structurally and lead to increased costs.

- Existing infrastructure may be outdated and inadequate.

- Building on small sites, where there is very little room for equipment necessary for construction, can be difficult and costly.

- Infill development can be challenging in neighborhoods with old housing stock. Resale can be challenging because the new housing developed may be much more expensive than surrounding properties.

- Permitting policies can be difficult in areas where potential infill development may occur.

### Sources of information about the strategy


- “Strategies for Successful Infill Development.” A publication of the Northeast Midwest Institute, Congress for the New Urbanism, 2001, Chapter 3. Available at: [http://www.nemw.org/infillch03.pdf](http://www.nemw.org/infillch03.pdf)

- City of Phoenix’s Infill Housing Program website (includes links to sites including cities currently implementing infill development). Available at: [http://www.ci.phoenix.az.us/BUSINESS/infilpgm.html](http://www.ci.phoenix.az.us/BUSINESS/infilpgm.html)
• Municipal Research and Services Center of Washington, Infill Development: Completing the Community Fabric webpage. Available at: http://www.mrsc.org/Subjects/Planning/infilldev.aspx#barr

• Denverinfill.com homepage (provides information about the urban infill development projects in downtown Denver). Available at: http://denverinfill.com/

• “What is Infill Development?” Part of the Kalamazoo County Clearinghouse webpage. Available at: http://www.kzoo.edu/convene/clearinghouse/Infill%20development.htm


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January, 2008

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