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The Smart Growth Network

The Smart Growth Network is a partnership of private sector, public sector and non-governmental partner organizations seeking to create smart growth in neighborhoods, communities and regions across the United States. Network Partners include the U.S. EPA’s Development, Community and Environment Division, Center for Neighborhood Technology, Congress for the New Urbanism, International City/County Management Association, Local Government Commission, Northeast-Midwest Institute, State of Maryland, Surface Transportation Policy Project, Sustainable Communities Network, and Urban Land Institute.

Local Government Commission

The Local Government Commission is a non-profit, non-partisan membership organization of forward-thinking leaders including mayors, city councilmembers, and county supervisors, along with associate members drawn from local government staff and community leaders. With almost 1,000 members, the LGC provides a diverse forum for exchanging ideas and inspiring local leaders to action. The LGC’s services are tailored to local government leaders. We provide practical, tested ideas and programs that foster a sustainable environment, strong economy, and social equity, as well as meaningful civic involvement.

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BUILDING LIVABLE COMMUNITIES

A POLICYMAKER'S GUIDE TO INFILL DEVELOPMENT

JANUARY 2001

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A Local Government Commission Initiative

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WHY BUILD IN TOWN?

The way we plan and build our communities has a major impact on the efficiency of our society, in terms of time, money and resources. This efficiency, or lack thereof, impacts us socially and economically, and it affects the quality of our environment.

And yet, in the words of architect David Mogavero, “While we have made major advances in many fields, the U.S. has grown the most inefficient cities in the world. We invest in new infrastructure and, before it is utilized fully, we move on. We build at densities and in locations that maximize the capital and operating costs of all systems.”

Our inefficiency is at its worst when we examine the way we lay out our communities.

We are spreading out more and driving more.

➢ In Seattle, from 1970 to 1990, the population increased 38% while urbanized land increased 87% and vehicle miles travelled ballooned by 136% (1000 Friends of Oregon, 1997). Similar patterns can be seen in cities across the country. Even cities like Cleveland and St. Louis that experienced a decline in population have grown in land area.

➢ The more land use patterns sprawl, the more time we spend in the car. According to the Surface Transportation Policy Project, 69% of the increase in driving from 1983 to 1990 was due to factors influenced by sprawl, such as longer car trips and a switch to driving from walking or transit. Population growth itself was only responsible for 13% of the growth in driving. According to the Wall Street Journal, since 1980, the U.S. population has grown by 1% a year, but vehicle miles driven have risen by 3.2% per year. Trip length grew at rates well over 3% per year during the 1980s, and is expected to increase 25% per capita between 1990 and 2010 (Sierra Club).
Authors Jeffrey Kenworthy and Peter Newman found that residents of U.S. cities are the largest gasoline consumers in the world – twice as high on average as those in Australian cities, nearly four-and-a-half times higher than those in European cities, and ten times greater than those in Asian cities. In California alone, between 1980 and 1998, on-road gasoline consumption grew by 79% (California Energy Commission).

The fiscal impacts on government of inefficient planning are very significant.

According to the New Jersey State Development Plan, building infrastructure to accommodate a population increase of 520,000 with conventional sprawl development would cost $1.3 billion more for construction, and $112 million more annually for operations over a 20-year period, than accommodating that same population increase using infill and more compact land use patterns. The high cost of sprawl is related to the increased need for roads, water and sewage system construction, and the added annual cost to local government for police, fire and other services. (Rutgers study)

Increasingly, communities are finding it impossible to keep up with the cost of stretching infrastructure out to the suburbs. The Southern California Association of Governments (SCAG) reports that while the total transportation needs of its region over 20 years amounts to $34.8 billion, only $18.4 billion is available – leaving a deficit of $15.4 billion. The San Francisco Bay area reports a 20-year shortfall of $4.7 billion for operations and maintenance costs. (Bates, 1990, 2)

Government, and society at large, subsidizes automobile use in the amount of $378 to $935 billion per year, according to several recent studies (Pucher). A large part of the subsidy pays for the “hidden” costs of motor vehicle use, such as air pollution, police services, noise and congestion. The artificially low cost of driving has helped create a demand for housing on the urban fringe.

Transit subsidies are greater when densities are lower. The lower the residential and commercial densities along transit routes, the less likely that people will use transit. The lower the use, the more likely that income from the farebox will have to be matched with very high subsidies to pay for transit service.

Land sitting vacant within an urbanized area can represent lost sales and property tax opportunities. Vacant properties are also susceptible to trash build-up, arson, graffiti and other problems which reduce the value of surrounding properties and impact the success of nearby businesses.

Inefficient land use patterns have negative financial impacts for the business community and individual alike.

The California State Department of Transportation (Caltrans) estimated in 1990 that more than 197,000 hours per day were being lost due to traffic congestion, costing California businesses more than $2 million a day. In 2000, Caltrans reported that San Francisco Bay Area congestion had risen 87% since 1995, and in just one year, from 1998 to 1999, delays jumped 15 percent. Bay Area congestion – estimated at 128,300 hours per day in 1999 – costs motorists nearly $1.5 million a day in lost wages and wasted fuel.
➢ Air pollution costs the agricultural industry more than $300 million per year as estimated by the California Air Resources Board. The automobile is a major source of this pollution.

➢ Water pollution is also a problem. A joint study by the U.S. Department of Transportation and the Environmental Protection Agency compared conventional low-density development and traditional town development, to determine the effect each had on surface water pollution. Under the sprawl scenario, the volume of surface water runoff was 43% higher and nitrogen and phosphorous loadings were three times higher than for more compact development. (Belle Hall study, Charleston Harbor Project)

➢ Of the $345 billion dollar U.S. trade deficit in 1999, 24% is attributable to our dependence on foreign oil, much of which is used to power our cars.

➢ An American Lung Association survey of health care costs related to air pollution concluded, “...[T]he total health cost from exposure to air pollution by the population of the United States lies in the range of tens of billions of dollars annually.” Studies in Southern California indicate that annual health costs in the region could be reduced by $4.7-4.8 billion if the federal air quality standards were met for ozone and particulate matter. (South Coast Air Quality Management District)

➢ In a 1995 report on the effects of urban growth on agriculture in California’s Central Valley, the American Farmland Trust compared the consequences of adding an expected 8 million people by the year 2040 to the Valley in two possible scenarios: at 3 dwelling units per acre and 6 dwelling units per acre. The summary report concluded that “cumulative loss of direct and indirect agricultural sales between now and the year 2040 would be $72 billion higher for low-density urban sprawl than for compact, efficient growth.” Furthermore, cities and counties would save $29 billion in taxpayer-financed services over a 45-year period if residential development occurred at an average 6 units per acre.

➢ If transit or walking are not transportation options, everyone of driving age in the household will have reason to need a car. A study by John Holtzclaw showed that residents of a mixed-use, transit-oriented development were spending about $8,000 per household annually on their cars. By contrast, households in a nearby sprawling suburban community were spending over $18,000 annually on automobile transportation.

➢ A study in 1998 by Criterion Planners/Engineers of Portland, OR comparing infill and greenfield development found that the infill project would cut travel time, reduce environmental impacts, lower travel costs and infrastructure costs, and improve community livability. The results all favored infill: infrastructure costs would be reduced 90%; loss of open space would be 90% less; transportation energy use and greenhouse gas emissions would be cut roughly in half; ozone precursors would be almost half; and, all non-auto modes of transportation would improve while auto use decreased. For more information, call Will Schroer at (651) 698-0788, or Geoff Anderson at U.S. EPA, (202) 260-2769.

In many places, the town square and main street are gone, replaced by shopping malls and parking lots. (“Creating Transportation Choices Through Zoning,” SNO-TRAN, October 1994)
Diverting investment from cities produces a dismal cycle of decline, crime and hopelessness. The cycle begins as investors look for more attractive returns outside existing cities. As new jobs and housing locate on the urban periphery, they are followed by those best able to seek them. The people and businesses left behind are poorer, both older and younger. As tax revenues fall, demand for services rise. As schools, parks, libraries and other services suffer, more investment leaves the cities, accelerating the downward cycle. According to Minnesota State Legislator Myron Orfield, residents of the central cities in the Twin Cities area actually spent over $6 million a year in sewer extension costs to help move middle-class households and businesses to the edge of the region.

The newly urbanized areas must invest in new public and private infrastructure, from libraries to churches, demanded by growing and changing populations. As these costs rise, these areas become less attractive and investment moves on. Soon these areas begin to see gangs, drugs, graffiti and other symptoms of urban decline.

The cost of supporting abandoned areas acts as a monumental social and economic drag on regional economies and the state and country as a whole. With job opportunities concentrated far from the urban unemployed, society faces the difficult choice of providing affordable transportation and housing in the suburbs or paying for the growing costs of welfare, prisons and crime control in places where few jobs exist.

Inefficient land use patterns damage our quality of life.

- Our nation’s agricultural land, one of our places of beauty, is being lost at an estimated one million acres a year, according to the American Farmland Trust.
- In many places, the downtown center and main street are gone, replaced by suburban shopping malls, “big box” discounters, and large expanses of parking lots. Gone also are the public gathering places that create and support a sense of community.
- By deserting old development in favor of the new, we are losing our sense of history. Historic buildings are left to crumble and with their loss, we lose part of our cultural heritage.
- Our children and the elderly are often left stranded, unable to get where they need to go. Densities are too low to support transit, and walking or biking are often impossible. This increasingly means that older persons cannot stay in their homes, even though they could live independently if stores, services, and activities were nearby. For many older persons, the double trauma of leaving their homes and also leaving the neighborhood is too much to bear.
- Additionally, many children are isolated and turn to television for their primary recreation, rather than neighboring playmates or other activities.

---

BUILDABLE ACRES BY DESIGN TYPE

<table>
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<th>Design Type</th>
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<td>Regional Centers</td>
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<td>Sub-Regional Centers</td>
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<td>Other</td>
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</tr>
<tr>
<td>Redevelopment Component</td>
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</tr>
</tbody>
</table>

Growth in Portland can be accommodated by infill development. The table assesses a concept that creates the most intensive centers and corridors.

There is room to grow within existing city boundaries while maintaining historic population levels.

- Portland’s regional plan calls for an additional 50,000 new housing units in Portland by 2015. A report to the city, Infill and Redevelopment Strategies, demonstrates that this growth can be accommodated through infill development. (Livable City Project Update)

- In a study of 900 jurisdictions, Rolf Pendall of UC Berkeley’s Institute of Urban and Regional Development found that there is enough land to accommodate around six million new households within existing urban areas if all the land zoned for multi-family was developed. (On the Ground)

We can no longer afford to continue building communities in an inefficient manner when there is a viable alternative.

- According to the Bay Area’s Metropolitan Transportation Commission, the State of California alone is facing a $100 billion deficit toward financing projected transportation needs over the next eight years.

- The 1995 Report titled Beyond Sprawl: New Patterns to Fit the New California, produced by the Bank of America, the California Resources Agency, the Greenbelt Alliance and the Low Income Housing Fund, states that the cost of housing another generation through sprawl is “potentially crippling” to government and society.

Adopting infill development does not represent a call for no growth. Infill development supports smart growth policies with greater housing options and a true accounting for the real costs of our development patterns. We need to build for the next century, not the last one. Increasing our land use efficiency will save money for businesses, government, and the individual. And the result should be a higher quality of life for everyone.
There are many good reasons why developers prefer to build on raw land, and some of these relate to local government policy. Even though there are greater economic, social and environmental costs to sprawl development than infill, our public policies have stacked the incentives in the wrong direction.

**Zoning for separate uses has gone too far.**

It all started back when reformers fought to prevent industrial smokestacks from spewing their noxious fumes over neighboring homes. Those reforms kicked off a campaign to separate uses from each other which came to dominate American planning. While there is still a need to keep people safe from the pollutants produced by heavy industry, there is a growing recognition that the effort to separate uses has gone too far.

Through our land use plans, we separate homes from jobs, stores and services. Our zoning regulations go even further by requiring that buildings be pulled back from the street and away from other buildings. We require extra-wide streets. We do not allow different types of housing to mix, nor do we allow the bakery or café to locate on a residential corner. No longer can we walk to the neighborhood store to buy a loaf of bread or an ice cream cone.

We visit older, more charming neighborhoods and towns and wonder, “Why aren’t we building communities like this any more?” The answer lies largely in the fact that our local planning and zoning regulations simply do not permit it. Most current zoning ordinances and development regulations have a strong suburban bias that would prohibit many favorite downtown and in-town neighborhoods from being built today. Usually no single regulation is at fault; it is the sum total of all of the ordinances and regulations together.

**The overall costs associated with infill development are more than building on raw land.**

Architect David Mogavero summarizes the costs per square foot of infill development versus sprawl. His 2000 figures for the Greater Sacramento area in California are as follows:
Mogavero uses these figures to demonstrate that for the same unit price, the sprawl developer can provide a larger home. Of course, these figures do not take into account the environmental and social costs of sprawl, which are not borne by the individual developer.

Some of the current added expense of infill development is related to the fact that infill projects are usually smaller in scale but have the same amount of overhead. Other added costs relate to government policy.
Toxics: Toxics legislation – enacted for important public health reasons – can be a serious barrier. It is estimated by the ERIC Group, a company which insures against contamination liability, that 12% of all commercial real estate in the U.S. is contaminated. Superfund legislation was enacted to ensure that polluters pay for cleaning up the toxic contamination they leave behind. However, the law makes any property owner liable for clean-up, regardless of whether or not the owner caused the contamination. Further, clean-up levels and decontamination procedures are not predictable and may become snarled in the Superfund bureaucracy.

Because of the risks associated with site cleanup and liability, smaller developers will usually avoid vacant infill lots because they have a much higher probability of contamination than greenfield sites.

Beyond the risks associated with liability and litigation costs (especially on small-scale sites), the developer has to deal with financing and lender fears. These cost risks and financing difficulties make the projected reuse difficult to achieve without financial incentives. In addition to the financing difficulties, contamination cleanup will result in additional delays. Once again, these delays cost the developer heavily in interest payments and fees on the potential development site.

Parking: Buying land for surface parking is very expensive in an already developed area. Structured parking is also costly. Excessive parking requirements can easily add 20 to 30% or more to the cost of the project. Unfortunately, many local governments’ parking requirements fail to acknowledge that there may be reduced parking demand in a walkable environment or one which is served by a good transit system.

Permits: Infill is more expensive to develop than suburban subdivisions, in part because the number of units being produced is usually much less than would be built in a new community. For example, a 10-unit infill project and a 100-unit suburban project both must go through a similar permit process. While permitting costs are roughly the same for each project, the infill project must pay them out of the projected return on ten units rather than on 100 units.

Largely due to past experience with poor quality examples, many community members actively oppose infill and mixed-use projects.

In the past, local governments have focused on regulations relating to particular uses and densities rather than paying attention to the much more important issues of design, scale, landscaping and, most important of all, the relationship of the building to the lot upon which it sits, to the rest of the street, and to the neighborhood. In other cases, there have been few or no regulations at all regarding what might be built where. The unpleasant results have become indelibly imprinted in the minds of many activists, and we find a portion of the population fearing growth of any kind, particularly infill and mixed-use development.

Residents may express some very legitimate concerns about reduced air quality, increased traffic, more parked cars, and overuse of civic buildings and parks. Some of the underlying issues linked to these concerns are fear of reduced property values, preservation of community homogeneity, and anticipated reduction in
service levels. What they often overlook are the many social, economic and environmental benefits that well-designed infill projects bring to a community.

Delays due to lengthy environmental review procedures and appeals by neighborhood groups who are opposed to projects can add thousands to hundreds of thousands of dollars to project costs. While large projects are better able to absorb these costs, smaller projects that operate on a narrower profit margin may not survive an extended permit process.

Developers often avoid infill or redevelopment projects in inner-city neighborhoods due to fear of reduced marketability.

Fear of crime, poor schools, and poor maintenance of the area is a deterrent to developers who might want to build in or redevelop inner-city neighborhoods. They rightfully question who would want to live or work in these environments.

A three-year study undertaken by the Urban Land Institute of six low-income, inner-city neighborhoods revealed that low quality of education and crime most strongly contribute to neighborhood decline. Poor quality infill development, lack of code enforcement, blight, and a lack of neighborhood were seen as contributing to the problem.

Finance and capital markets can be a barrier to the infill developer.

Lenders perceive mixed-use projects appropriate to infill development as risky because there are not many similar projects to which they can be compared. The problem is compounded by the fact that many banks separate their residential and commercial loan functions, so individual loan officers are not familiar with all elements of the project. Additionally, most lenders are unwilling to count much of the potential rental income from retail/commercial space towards revenues to support a loan, because lenders are concerned the space won’t actually lease.

Mortgages of infill projects are also difficult to sell to the secondary market (Fannie Mae, Freddie Mac, etc.). The secondary market sets the underwriting standards for most loans and these quasi-public institutions do not tend to underwrite condominiums, townhouses, live-work units, co-ops, CoHousing, mixed-use developments, and the like.

Identifying suitable infill sites can be difficult.

While there is a seemingly unlimited availability of inexpensive greenfield land for development, identifying and building on small parcels within urban areas is more labor intensive and more costly than on the urban fringe. The shortage of suitable infill sites can be an issue, as can the size of the parcels. Usually the larger sites are too small for the large developer, while the smaller sites are scattered and too hard to find. With all these restrictions, some developers are loath to build in central business districts or in older neighborhoods.

There is a right way and a wrong way to create mixed-use communities. Here’s an example of the wrong way.

(City of Glendale Planning Department)
Inadequate, poorly-maintained infrastructure in older communities and inner cities can be a problem for infill developers.

In some areas, it makes good sense to encourage infill development to take advantage of existing infrastructure because it is underutilized – but it must also be recognized that there are many older communities that are underserved by public facilities, and therefore require significant infrastructure investments. Large suburban parks, libraries, and new school sites, all financed by developers, are factors that have lured people to the suburbs. In contrast, the facilities in many closer-in neighborhoods have not kept pace with population growth and have suffered deferred maintenance due to ever-tightening local budgets. One developer cannot fix all the infrastructure problems, nor can cities ignore projects that will contribute to an already over-burdened system.

Therefore, the barriers to infill development are strong but not insurmountable.

These problems are serious, but there is hope. Let’s now talk about what you can do to solve them.

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Computer simulation helps visualize how infill development can create new realities for communities.

(City of Orlando Planning Bureau)
Local governments have many tools at their disposal to encourage infill development. Most importantly, cities need to develop a clear vision of what they want their future to hold, create a plan to implement that vision, and have the will to uphold the plan over the long term. Success will largely depend upon having strong leaders, and a solid citizen participation process which develops a constituency of residents, business people and interest groups who will work to monitor implementation of policies over the long term. Steps that local governments can take and examples of their use include:

**PLANNING PROACTIVELY**

**Define a vision for your community.**

Residents of the Greater Vancouver Regional District (GVRD) in British Columbia have developed a vision of a compact region made up of “complete communities” surrounded by open space and served by rapid transit. This Livable Region Strategy was developed with input from over 4,000 residents through workshops, conferences, meetings and questionnaires. At these events, the choices were clearly laid out: “Did people want to live at higher densities in order to preserve open space?” and “Would they be willing to walk or take transit to preserve air quality?” The now-finalized GVRD Strategy calls for housing the region’s next million residents in medium- and higher-density residential areas rather than in low-density sprawl. Development intensity will increase in mixed-use centers, on obsolete industrial land, and in under-utilized commercial areas. Open space, including agriculture, parks and environmentally important areas,
Cities and regions across the nation have engaged in similar efforts to define a vision for their future. Noteworthy examples include Chattanooga, Tennessee (www.chattanooga.gov), Portland, Oregon (www.ci.portland.or.us) and the Portland Metropolitan Area (www.metro-region.org), St. Louis, Missouri (stlouis.missouri.org), and the Salt Lake City Region (www.envisionutah.org).

Identify specific infill sites where you want to see growth so a small builder can easily find sites that are available and target districts where you want infill to occur.

The City of Chico, California, adopted a General Plan in 1994 that contains a wide range of policies and recommendations which designate sites for infill development and create “Neighborhoods, Not Subdivisions.” For example, the “Diamond Match” site is identified in the plan as a high priority infill site in the city. Through the plan, the City will be able to minimize development pressure on agricultural lands and create lively activity centers in town. For more information, contact Senior Planners Tom Hayes at ☎(530) 895-4853 or Pamela Figge at ☎(530) 895-4743.

Designate the types of development you want to see in specified areas.

The City of Newman in California’s San Joaquin Valley adopted a General Plan goal to “promote the development of an economically vital, pedestrian-oriented downtown that includes retail, commercial, office, residential, civic, cultural, and recreational uses.” Policies supporting this goal encourage the development of new civic buildings and cultural facilities in downtown, and the location of businesses and services (for example, theaters, restaurants, and galleries) providing cultural and social activities that extend downtown’s active hours. One policy states specifically that “major new retail development shall be concentrated within the downtown.” For more information, contact City Manager Cleve Morris or Planning Director Bob Borchard at ☎(209) 862-3725.

In May 2000, the City of Hailey, Idaho, adopted an economic development element of the Comprehensive Plan that encourages infill development within the Central Business District (CBD). Under the Comprehensive Plan, properties outside of the currently zoned CBD will not be developed until the district is “properly filled.” Infill development is also encouraged within the Historic District to “create a more dynamic and useable marketplace.” For more information, contact the City of Hailey at ☎(208) 788-4221.

In Manteca, California, city councilmembers have decided to grant exemptions to the city’s 3.9% residential growth cap ordinance for infill development. The exemption is a way to eliminate the city’s vacant lots and restore the urban fabric while supporting growth management. For more information, contact the Manteca City Clerk’s office at ☎(209) 239-8417.
Ensure a mix or range of homes to diversify affordable housing.

The City of Ogden, Utah, has designed an affordable housing development that mixes for-sale units with rental units. The development at Lorin Farr is a “blend” of affordable housing. The development mixes Low Income Housing Tax Credit renters with homeowners in a single-family setting – there are 11 owner-occupied homes and 13 homes are rented. This blend concept is one of the first of its kind in the nation, and will be the blueprint for similar developments for future affordable housing. New infill design guidelines were adopted to encourage creative land planning. For more information, call Richard Bryan, Project Coordinator of Ogden’s Neighborhood Development Division, at ☎(801) 629-8946.

Prepare a specific plan or precise plan for areas where you want infill development to occur.

The City of San Jose, California, has adopted as part of its General Plan a Housing Initiative calling for intensification of housing along transit corridors and in other specified areas. The City has prepared a number of specific plans to implement these strategies. One of the first was the Jackson-Taylor Residential Strategy. Located four blocks from a light rail station and one mile from the downtown, this neighborhood is an old industrial warehouse district with a number of vacant or abandoned buildings. The specific plan, adopted in 1991, dictates a transition to walkable, mixed-use neighborhoods containing residences, offices, ground-floor retail, industrial uses and a day care center. The City specified that retail space should include services that will allow local residents to satisfy their daily needs in the neighborhood. Since adoption of the specific plan, a significant amount of development has taken place. For more information call Laurel Prevetti, Senior Planner, at ☎(408) 277-4576.

The City of Pasadena, California, has also been actively using specific plans to target districts for high-quality infill development in order to carry out their General Plan goal that “Pasadena should be a city where people can circulate without cars.” The East Pasadena Specific Plan envisions the development of four distinctive land use districts linked to each other and to a light rail transit station. For more information, call Rob Olguin, Principal Planner for Pasadena’s Planning and Permitting Department, at ☎(626) 744-6646.

Establish redevelopment areas around existing and proposed transit centers.

The Spanish-Speaking Unity Council, working in conjunction with the City of Oakland, California, Fruitvale community members, and the Bay Area Rapid Transit (BART) district, is working on a transit village plan for the Fruitvale BART station. The transit village is a comprehensive neighborhood revitalization effort that includes new development and renovation of existing commercial establishments. The plan calls for a mix of housing, community-serving facilities, retail development, a cultural center, and an inter-modal transfer facility, among other uses. Funds committed to the project include: $6.2 million for senior housing from the Department of Housing and Urban Development; $780,000 for a pedestrian plaza and $2.6 million for a bus transfer facility from the Federal Transit Administration; and $2.25 million for a senior center from the City of Oakland. In 1999, an additional $4 million was committed through tax increment financing for the construction of the project. Groundbreaking began in Fall 1999 and further construction is...
scheduled to continue throughout 2001. For more information, contact Manuela Silva, Senior Executive Director of the Spanish Speaking Unity Council, or Evelyn Johnson, Project Director, at (510) 535-6900. For project updates, site design, and recent photographs, visit www.unitycouncil.org.

Prepare design guidelines for areas targeted for infill.

The previously mentioned East Pasadena Specific Plan includes design guidelines which spell out how pedestrian- and bicycle-friendly development, as well as scale compatibility with adjacent neighborhoods, are to be achieved. For more information, contact Rod Olguin, Principal Planner for the City of Pasadena’s Planning and Permitting Department, at (626) 744-6646.

In the City of Dallas, Texas, developers who receive funding assistance from the City must build and landscape their projects in accordance with special design standards. As reported by Rick Loessberg of Dallas County in Commentary magazine, these design standards have played a key role in the success of infill housing since they ensure that new developments will be of high quality and compatible with the neighborhood. Post Properties, a developer that has successfully built hundreds of units of housing just north of downtown Dallas, believes that design guidelines have helped create a positive identity for the area, and have lessened the adverse impact that high-density development can cause. For more information on their projects, contact Art Lomenick at (972) 851-3222.

According to infill developer Tom Sargent, people in San Francisco are buying homes right next to warehouses because there are design guidelines. Even though the area doesn’t look like a good place to live today, the guidelines provide a vision of a place where they will want to live in the future – and to some, this is enough to make the commitment to move into or build in these areas. Tom Sargent, a partner of Equity Community Builders, can be reached at (415) 263-1750.

Collaborate with other agencies whose activities are impacted by infill development, including transit agencies, school districts, service providers, and the like.

The City of Bakersfield School District spent $3.2 million on a downtown elementary school to support the children of commuting parents. This allows parents to drop their children off at school blocks away from where they work. Parents are able to be more involved with their children’s school activities, such as a game of kickball, popping in on a lesson, or just eating lunch. In some cases, businesses will pay for the construction costs and maintenance of the school as an amenity for their employees, while the school district provides the teachers and school supplies. For more information, contact Bakersfield City School District Media Services at (661) 631-4600.
Encourage joint development.

A child care center and 144 apartment units surround a trolley station, due to a successful joint development project undertaken by the San Diego Metropolitan Transit Development Board (MTDB) and a private developer. MTDB had excess land available after developing the station and offered the property for a long-term lease. Independently, a developer was going forward with plans to build 100 units on a parcel next to the station. The agreement enabled the developer to increase the size of his project by over a third, and the transit agency was able to put excess station land to good use. MTDB provided the land at no cost for the child care center, which is operated by a nonprofit group. For more information, contact Jack Limber, General Counsel at (619) 231-1466, or Miriam Kirshner, Senior Planner, at MTDB at (619) 557-4533.

The City of Long Beach’s redevelopment agency helped insure the success of the Pine Square Theater Project. Developers built this 142-unit, 16-screen movie theater, and 50,000 square-foot retail center. The Redevelopment Agency took responsibility for building the parking. This project is a key part of Long Beach’s downtown redevelopment plan, as it is located between two historic districts and one block away from a light rail transit station. For more information, contact Barbara Kaiser, Long Beach Redevelopment Agency, at (562) 570-6340.

ASSURING PUBLIC PARTICIPATION

Listen to and involve the community.

One of the most serious obstacles to infill development is neighborhood opposition. Many times, neighbors have good reason to be nervous – much infill development has, in fact, been detrimental to neighborhood quality. Trust among neighborhood residents, city officials and developers must be established through the mutual education and involvement of all groups.

Citizens in Rosemere, a suburb of Vancouver, Washington, had successfully blocked the approval of a 20-unit, suburban-like site plan on a passed-over, nearly vacant five-acre site. Because it felt the site needed to be developed, the City brought in a consultant group to see what the neighborhood would accept. Using visual images, the consultant assessed the likes and fears of residents, focusing on visual images rather than density. Using the input from the neighbors, prospective buyers, and brokers, a draft site plan was prepared. The results of the focus group sessions were also used to create design standards for the development. The neighborhood, which turned down a 20-unit subdivision, now supported 37 units on the same site. The new plan received unanimous approval from the City Council. For more information, contact Tom Phillips at (206) 441-7579 or visit www.townmeetingdirect.com.

Ideally, community groups should be involved in the long-range planning of their neighborhoods before specific projects are proposed. The establishment of an agreed-upon vision should reduce conflict later,
when projects that are consistent with the agreed-upon plan are proposed. In addition, community involvement builds the trust necessary for actions that make infill projects more possible, such as speeding up the permit process through master environmental studies or “by-right” zoning regulations, which are discussed later in this document.

Developers who make a good faith effort to work with the community also benefit from this approach. In Denver, the Affordable Housing Development Company worked with the community surrounding Elitch Gardens, an old amusement park near the downtown. As part of the planning for the site they held over 50 meetings with neighbors of the site. That interaction led to a much-improved plan for the project, and allowed both developer and neighbor to reach a shared vision. When a small group of residents emerged at the last minute to oppose the plan, the developers were able to demonstrate broad support for their proposal to build a mixed-use village that included office, retail, restaurants, day-care, a mix of single-family homes, apartments and townhouses, housing for the elderly, gardens and green space, ancillary houses, and a restoration of the old Elitch Theater to anchor an open plaza.

For a chronicle of citizen participation success stories and the citizen participation techniques used, see the Local Government Commission guidebook, Participation Tools for Better Land-Use Planning: Techniques and Case Studies.

Educate the community about the public benefits of infill and the tradeoffs involved between infill development and more sprawl.

The BRIDGE housing corporation is one of the most successful nonprofit developers in the U.S., in part due to partnerships with local governments, community-based organizations, and neighborhood groups. BRIDGE has been able to obtain consensus by showing that their projects will provide residents with a quality living environment and add value and amenity to the broader community. For more information, contact Brad Wiblin, BRIDGE Project Manager, at ☎(858) 535-0552.

Address the importance of density, mixed-use and transit in creating vibrant communities.

Local governments need to educate the public on the benefits of more compact development. A 1995 Journal of the American Planning Association article by Kent Robertson, makes the important point that a low-density downtown has less pedestrian and transit activity — and therefore has considerably less vitality than a denser neighborhood. Higher densities are also needed to support an efficient transit system which, in turn, helps increase pedestrian activity. Finally, Robertson argues the case for mixed-use development, since an all-business downtown (i.e., a central business district) without residences will be devoid of people after work and on weekends. As Jane Jacobs stated: “A central business district that lives up to its name and is truly described by it is a dud” (Jacobs, 1961). For more information, contact Kent Robertson, Director of Local and Urban Affairs at St. Cloud State University, Minnesota, at ☎(320) 255-3184. (Robertson, 1995).
Address the myth that high density leads to more crime and congestion.

The Chesapeake Bay Foundation, a Virginia nonprofit dedicated to protecting natural resources along the bay, conducted a study that puts to rest the myth that high density leads to more crime and traffic congestion. They concluded that there is no cause and effect relationship between housing density and crime rates. Scholar and urbanist Jane Jacobs, in The Life and Death of Great American Cities, made excellent arguments for density, and for community designs that put more “eyes on the street.”

According to Portland, Oregon’s chief of police, community policing is made much easier with designs that include pedestrian friendly streets, a diversity of housing types and densities, and a diversity of people of different ages, incomes and cultures who get to know one another. Driving around spread-out suburban areas is very inefficient for police patrols, and many such areas never see any police presence.

The traffic corollary is that density (and a mix of uses) does not produce more traffic than low density communities. In fact, a 1994 study showed that a doubling of density reduces the total number of vehicle trips per household in an area by 20 to 30%. In other words, individuals living in a compact neighborhood will drive 20-30% less than residents of a low-density neighborhood. For more information contact John Holtzclaw at (415) 977-5500 or visit the Sierra Club web site at www.sierraclub.org/sprawl/community/design.asp.

Get out the facts on higher density and affordable housing.

Although it would seem likely to generate neighborhood opposition, an infill housing project in San Jose for low-income single parents and their children generated no opposition at its public hearing because the developer worked with existing neighbors to address their fears and concerns. The Doyle Street CoHousing project in Emeryville, California, overcame original neighborhood opposition. Future residents talked with all of the neighbors, and eventually obtained 84 signatures on a petition supporting the project before it went to the City Council for approval. For more information on both projects, contact Chuck Durrett or Katherine McCamant at McCamant and Durrett Architects, at (510) 549-9980.

A UC Berkeley study investigated whether or not affordable housing projects impacted property values in the surrounding neighborhoods. Researchers looked at 3,000 home sales in neighborhoods located within a quarter mile of projects built by the San Francisco Bay Area–based BRIDGE Housing Corporation. The report states that proximity to the housing projects “shows essentially no relationship with home sales prices.” For more information, contact Brad Wiblin at BRIDGE at (858) 535-0552.
USING PUBLIC FACILITIES AND DEVELOPMENT FEES TO ATTRACT INVESTMENT

locate public facilities in areas where you want to attract infill development (i.e., invest your money where your mouth is).

Cathedral City, California, in the early 1990s committed to improving its downtown through a plan to build a civic center and police station on a town square. According to former Downtown Executive Director Bruce Liedstrand, rather than subsidizing individual projects, the city’s approach was to invest in these public facilities to make certain areas more attractive to private investors. To fund the project, priorities were examined, and money slated for routine street projects was redirected to the downtown project. In addition, $9 million in regional transportation funds were secured and a private foundation was formed to apply for grants.

A similar approach was successfully undertaken in Mountain View, California, where $50 million that was put toward downtown street improvements, a new civic center, and a performing arts center, has created a high quality environment and generated additional private investment. For more information on either project, call Bruce Liedstrand at (415) 428-1700.

assume or share the cost of infrastructure improvements.

Forty-two acre Herr’s Island sits in the Alegheny River, two miles from downtown Pittsburgh, Pennsylvania. Until 1995, the island was a brownfield site resulting from decades of use for industry and as a stockyard and slaughterhouse. Working closely with Pittsburgh’s Urban Redevelopment Authority (URA), developer/builder Murray Rust developed the island into Washington’s Landing, a mixed-use infill community consisting of 88 residential units in a village setting. After two years of environmental cleanup, the URA built the main public street, installed sewers and waterlines, and a public park. In addition, the URA agreed to wait on payment for the land until the units were sold, thereby freeing Rust from carrying the cost of the land. For more information, contact Robert Rubinstein at the URA, rrubinstein@ura.org.

In 1994, the Portland, Oregon, City Council adopted a 20-year goal to provide housing for 100,000 new residents within the city. Downtown neighborhoods near workplaces will provide a “thriving 24-hour community on both the east and west sides of the Willamette River” and “will attract complementary development and jobs and help to deter the street crime plaguing many other urban areas within deserted cores.” Much of this new development is now occurring in the River District where medium to high-density residential development is accommodating a growing population. The project expands on the Union Station/Old Town area, an existing foundation of public and private investment. An additional $158.5 million dollars in public investment and $711.4 million in private investment was used for residential construction, an agricultural marketing center, park development, and transit infrastructure. Public assistance...
facilitated between 1,900 and 3,100 units of affordable housing. For more information, contact Bruce Allen with the Portland Development Commission at (503) 823-3357.

**Set development fees which encourage infill and discourage sprawl by charging less for infill projects.**

The City of Lancaster, California, has adopted an “Urban Structure Program” that discourages urban sprawl by adding operations costs to its development impact fee. The impact fee specifies an operations fee that includes a 2% surcharge (over a fee charged for capital improvements) for each mile that a project is located outside of the city’s core area. The fee assumes a 20-year operations life span. The program is based on a fiscal analysis of the costs of providing distance-related public services, such as street sweeping and community safety. For more information, contact Dave Ledbetter at (661) 723-6000.

The City of Phoenix has adopted Infill Housing Program incentives and fee waivers. The City waives building plan review and building permit fees, and the development occupation fees for water and sewer. There is a $2,250 cap on the total incentive granted – anything above that cap is borne by the developer. For more information, contact Dennis Gray of the Phoenix Business Customer Service Center at (602) 534-2004 or visit their web site at www.ci.phoenix.az.us/business/inflinc.html.

**Reduce or delay development fees until the developer sees a positive cash flow.**

To encourage infill development within the downtown and midtown areas of Sacramento, the City offers a reduction in development fees. Multi-family units are eligible for waived water development fees – typically assessed at $1,800/unit – and all infill development is granted a 25% break on planning fees. The City is currently streamlining its development process and re-examining its infill incentive program, and expects to offer a 65% reduction in sewer hook-up fees. For more information, contact Lucinda Wilcox at (916) 264-5052.

**Work with builders to reduce costs through rebates for energy-efficient buildings.**

Through the California Energy Commission’s Energy Partnership Program, the City of Oakland will enter an energy performance contract with a design/build contractor to encourage energy efficiency and significant energy savings on behalf of the city. As opposed to an up-front reduction in development fees, the program offers long-term rebates for energy efficient buildings. Energy monitoring devices are used to assess building performance and if the building performs better than the target, the City awards the contractor a portion of the future stream of energy savings, up to $250,000. In 1998, based on energy savings, Oakland was awarded a $193,000 rebate from PG&E; the City, in turn, gave $93,000 to the contractor. For more information, call Scott Wentworth in Oakland’s Public Works Department at (510) 615-5421. For information on the Performance Contracting Pilot Program, including eligibility, contact Eley Associates at (415) 957-1977 or visit their web site at www.eley.com.

Located in Calistoga, CA, the 48-unit La Pradera Apartments has a variety of one- to four-bedroom units. Funding for the $6.8 million affordable housing development came in part from a grant from the Cowell Foundation, the Federal Home Loan Bank AHP Program and tax credits sold to Clorox.

(BRIDGE Housing 1993-94 Annual Report, photo by Robert Houser)
Reduce parking requirements for developments where it is clear that people can walk or take transit to where they are working.

The City of Berkeley, California, allowed a significant reduction in parking requirements for a mixed-use senior housing project and health clinic. The non-profit developer provided transit and demographic data on the future senior residents in addition to information about users and employees of the clinic. Results showed that users and employees used public transit or walked to the clinic, and that senior citizen car-ownership rates were well below average because of transit accessibility. The City granted a 100% waiver of the clinic parking requirement, and instead required a sunken parking garage with one parking space for every five senior apartments. For more information, contact Resources for Community Development at ☎(510) 841-4410.

Adjust level of service street standards and/or provide trip reduction credits for infill projects that encourage walking, bicycling, and transit use.

Level of Service street standards were created as a way to make sure that new projects did not overburden congested streets. However, there are several issues surrounding Level of Service standards (LOS) that affect infill development. First, LOS have had the side effect of encouraging sprawl development. This is because it is easier to build road capacity on the outskirts than in the existing urban fabric, and the actions required of new projects to reduce congestion at impacted existing intersections are often prohibitively expensive (and perhaps an unfair assignment of responsibility to new projects for a problem that already exists).

Second, and related, is the fact that LOS do not generally take into account two factors regarding congestion: (a) a certain level of congestion is needed to support local businesses, create active pedestrian environments, and make transit services efficient; and (b) infill projects that encourage walking, bicycling, and transit use do not necessarily generate the same level of trips as other developments. Both Level of Service and trip reduction standards should be reviewed and revised to look realistically at the impacts of infill projects, so congestion mitigation measures are reasonable and not financially prohibitive for infill developments.

Based on recent state law, the State of Florida adopted an administrative rule to reduce the adverse impacts of LOS standards on urban infill development and redevelopment. The rule allows local governments to apply to designate a specific geographic area as a “transportation concurrency exception area” (TCEA). These areas may include areas delineated in the local government comprehensive plan for urban infill, redevelopment or downtown revitalization, and which meet certain criteria. Once the TCEA is designated, all land uses and development and types of facilities within the TCEA are exempt from State LOS standards. For more information, call Rob Magee, Florida State Department of Transportation, at ☎(850) 414-4800.

Another way to tackle the adverse impacts of LOS standards on infill development is to adopt an alternative standard for measuring the transportation accessibility of an area. In 1998, the Local Government Commission developed the Local Index of Transit Availability (LITA) which can be used to encourage new development that will generate a large number of trips to locate in areas that are well-served by transit and...
which often correspond to sites in built up or infill areas. A manual describing how LITA works can be downloaded from the LGC’s web site at www.lgc.org/clc.

ASSISTING WITH PROJECT FINANCING

Assist in financing projects using city/county funds, tax increment financing, bond revenues, and other sources. Funds may also be available through grants such as Community Development Block Grant (CDBG) awards under the Department of Housing and Urban Development’s (HUD) Section 108 program.

According to infill developer Tom Sargent, city financing can be used to assist infill site developers by:

- Providing predevelopment grants and loans to explore project feasibility on tough sites;
- Acquiring and/or assembling land;
- Making loans for or writing down the costs of land acquisition;
- Advancing loans against committed, but not funded, equity or debt; and
- Funding developer reserves.

Tax increment financing (TIF) districts have been very successful in encouraging infill development near downtown Dallas. According to Tom Cole of the City of Dallas Economic Development Department, the quality of development has been high and has led to additional private investment. In fact, in the State-Thomas TIF district, $6.1 million in public investment has led to $55.4 million in private investment. Even more astounding is the $1 to $18.7 public/private ratio in the City Place TIF district, where a $1.7 million public investment has resulted in $32.3 million in private investment.

The TIF district strategy is to: reduce land use uncertainty through zoning and design guidelines; transfer infrastructure costs to the public sector; and assure a high quality visual environment. Crawford also attributes some of Dallas’ success to the use of public improvement districts (PIDs), in addition to tax increment financing districts. PIDs eliminate private sector “free-riders,” through assessments on private property to fund public improvements or supplemental services, over and above those provided by the city. For more information, contact Karl Stundins at (214) 670-1690.

Assist the developer in obtaining financing through tax-exempt bonds, loan guarantees, or a letter of credit.

An historic building was saved and 124 units of housing built near a subway station, when the Metropolitan Transportation Authority (MTA) and the Community Redevelopment Agency (CRA) worked
with private developers on the Grand Central Market project in Los Angeles. Originally, the developer could not get financing for the residential portion of the project, so the redevelopment agency stepped in and issued bonds totaling $44 million to finance the project. Both multifamily housing bonds and redevelopment bonds for restoration of the historically-significant commercial portion of the project were used. The MTA, along with the redevelopment agency, played a critical role in project financing by making direct payments of debt service for the bonds. The two agencies are being reimbursed through project income and bond proceeds. The project includes the apartments and office and retail space. For more information, contact Mary Lee at the MTA, at (213) 922-2467.

Pasadena’s Holly Street Village project near the future Blue Line light rail station also benefited from public financing assistance. Tax exempt municipal bonds and MTA and city grants helped finance this $55.3 million project adjacent to Old Pasadena. The Holly Street Village, developed by the Janss Corporation, consists of 358 new rental housing units, rehabilitation of the Hall of Justice Building to accommodate sixteen loft apartments, service commercial and street-level retail, and construction of the facility to accommodate the Pasadena Civic Center light rail station. The project includes 75 apartments set aside for very low-income residents. For more information, contact the City of Pasadena Housing and Development Department, at (626) 744-4155.

Del Norte Place in the City of El Cerrito, California, is located one block from a Bay Area Rapid Transit (BART) station. This project, consisting of 135 units and 21,000 square feet of commercial space, was built as a joint venture between the developer, the IBEX Group, Contra Costa County, and the El Cerrito Redevelopment Agency, and was completed in 1992. The Redevelopment Agency issued $3 million of Qualified Redevelopment Bonds to finance land acquisition, and the IBEX Group provided approximately $7 million in equity financing. Contra Costa County provided permanent financing in the form of $11 million in tax-exempt, multi-family housing bonds. CDBG funds were also tapped by the Redevelopment Agency.

Total project costs grew from a projected $14 million to over $18 million. Despite escalating costs, quality was not sacrificed and the end result is an attractive, affordable project that meets housing needs and supports transit. The project includes 27 units (20%) affordable to very low income residents, and has 29 units reserved for seniors. A large percentage of the residents commute by BART, and many of the senior residents don’t even own a car.

The ground floor retail portion of Del Norte Place struggled for several years as a result of limited foot traffic and underutilized and vacant properties nearby. That picture has changed, and in early 2000 the retail neared 100% occupancy. For more information, contact Planning Manager Jill Keimach at El Cerrito Community Development Department at (510) 215-4330.

The Belmont Dairy Building in Portland was an old nine-building complex that had been abandoned since 1990. The developers – Shiels Obletz Johnson, LLC – saved 40,000 square feet of the original 80,000 square foot dairy and recycled many major elements of the original complex. Now a combination of two-story (existing) and five-story (new construction) buildings, the mixed-use project stands as a great example of what can be done with infill development of older buildings that offer amenities such as proximity to transit.

Holly Street Village in Pasadena was built with public financing assistance near a future light rail station. (City of Pasadena)
and an established business district. Yet, without creative financing to bring it about – which was the most complicated part of the development process – the project would never have been built. The financing was an unprecedented mix of government loans, conventional financing (35%), and low-income housing tax credits. The lenders included: the Bank of America, Fannie Mae of Washington, DC, City of Portland Office of Transportation, State of Oregon Housing and Community Services Division, and State of Oregon Transit Oriented Development/Congestion Management and Air Quality Program. First Amherst development Group of New York provided venture capital. For more information contact Doug Obletz of Shiels Obletz Johnson, LLC at ☎ (503) 242-0084.

**Offer developers city-owned land or swap key parcels.**

Offering city-owned land to developers who agree to build appropriate infill projects there, or swapping city-owned property for developer-owned parcels can encourage building on particular sites. For example, the owner of a key property in an area targeted for infill who is unwilling to build on that site may be willing to accept in exchange a city-owned parcel of similar value, allowing the city to move forward on the targeted site. Many cities own property acquired through tax foreclosure or a public use condemnation action for a park, street, school, etc. that was not built. Thorough inventorying of these sites may yield opportunities for exchanges or contributions to projects that can significantly lower a project’s land costs.

The City of Tucson, Arizona, is a partner with developers, builders, contractors, communities, and low-income residents to help build affordable infill housing. The city provides city-owned vacant land and works with developers and community activists for affordable housing. The city also markets the properties and finds eligible buyers. For more information, contact Bill Milliron of the Tucson Community Services Department at ☎ (520) 791-4124.

**Provide fee and tax waivers.**

The City of Sacramento offers developers the option to use “Infill Site” regulations that provide more flexibility than standard city zoning and offer incentives to infill development. The St. Francis housing project, a 48-unit senior and family housing complex, benefited from the infill incentives. The project was developed as a joint venture between the Catholic Diocese and a local nonprofit housing corporation. The project used a 25% density bonus over the permitted zoning and paid no city water development fees. Initial controversy surrounding the project was overcome when the applicants worked closely with parents of the children attending the neighboring school and the local neighborhood association to redesign the project, so that its massing and scale would be more sensitive to the existing neighborhood. For more information, contact Steve Peterson, Sacramento Senior Planner, at ☎ (916) 264-5981.

The Redevelopment Agency of the City of San Jose, California, was instrumental in the success of the Ryland Mews project. Ryland Mews is a 131-unit condominium project built at the north end of the San Jose downtown core, along a light rail line. In accordance with the City’s Housing Strategy, 38 of the units were for low- or moderate-income households. The Redevelopment Agency used a combination of 20% housing set-aside funds and 80% tax increment funds to help cover the costs of land, parking improvements,
Building Livable Communities

San Jose’s redevelopment agency used a combination of housing set-aside and tax increment funds to help cover the costs of land, parking improvements, and toxic remediation for Ryland Mews, a 131-unit condominium project along a light rail line in the downtown.

and toxic remediation. This project also qualified for reduced building and park impact fees under the city’s “Central Incentive Zone” program. For more information, call Jeff Bowlsby at the Redevelopment Agency of San Jose, at (408) 277-4744.

Use Community Reinvestment Act (CRA) funds.

In response to housing and employment shortages, three Latino non-profit organizations collaborated with the City of Modesto in 1998 to establish the Workforce Development Program (WDP). The WDP consists of a pre-apprenticeship construction training program that includes both classroom and hands-on training for the Latino community and prepares them for work in construction trades. The program also includes a low-income housing component in which Bank of America and Wells Fargo will provide mortgage aid to program participants. The WDP is utilizing both public and private funding to support the program and is using the Community Reinvestment Act (CRA) to engage lending institutions. Under the CRA, lending institutions are required to invest in communities in which they do business. Wells Fargo Bank has pledged $20,000 in CRA-related funding. To date, the City of Modesto has provided $44,000 in seed money and $90,000 for program design and curriculum. For more information, contact Lori Smith with the Modesto Workforce Development Program at (209) 577-5347.

Help subsidize the retail component of new mixed-use developments until the retail portion becomes profitable.

Sometimes in catalyst mixed-use projects, it may be necessary to build the retail portion early in the project’s life, to insure the project’s success with commercial and/or residential tenants. However, prior to build-out or in the early years, subsidies may be needed to guarantee the presence of retailers in what would otherwise be vacant store fronts, especially in cases where the other rents/leases alone cannot subsidize the retail space.

Southern Village, a neo-traditional community in Chapel Hill, North Carolina, includes a 2,000 square-foot neighborhood market. Since its opening in 1995, rent has been subsidized by Bryan Properties, which for the past two years has charged rent on a sliding scale (8% of gross sales). Based on the sliding scale, store owners have paid up to 40% of the market rent. At buildout, the community of Southern Village is expected to fully support the market, allowing the owners to pay full market rent. For more information, contact Bryan Properties at (919) 933-2422.
ZONING FOR MIXED USE AND HIGHER-DENSITY DEVELOPMENT

Zoning codes can be powerful mechanisms to support infill development and create pedestrian-friendly designs. Zoning regulations and guidelines should address neighborhood design issues, mixed-use development incentives, reduced parking ratios, and transit- and pedestrian-oriented design features.

**Revise your zoning codes.**

The City of San Diego undertook a comprehensive zoning code update to improve the effectiveness of the city’s regulations and to streamline permit processing. A major goal of the code update was to increase certainty in the permit process by providing objective regulations that can be reviewed at a staff level. As of the January 2000 adoption, the code update addresses infill issues such as residential design standards, shared parking, landscaping, and non-conforming rights.

In addition, several of the proposed amendments were drafted to implement the City’s Transit-Oriented Development Design Guidelines (adopted in 1992), including: pedestrian-oriented commercial zones, mixed-use incentives, reduced parking requirements along transit corridors, a townhouse zone, a small-lot single family zone that addresses garage placement, and a new Urban Village zone. For more information, contact John Wilhoit, Zoning Code Update Project Manager, at *(619) 236-6006.* For copies of the code, log on to clerkdoc.sannet.gov/Website/mc/mc.html.

**Adopt zoning ordinances for traditional neighborhood development.**

In 1997, Austin, Texas, adopted a city-wide traditional neighborhood development (TND) code that also expedites infill development. The TND ordinance and the criteria manual contain standards and design guidelines. The innovative TND ordinance, in which shopping, government services, and recreation are within walking distance of the residential areas, is based on the assumption that traditional neighborhoods need the interaction of a lot of elements to be successful. The TND ordinance helps streamline the approval process by two to three months. For more information, contact George Adams of the Austin Planning Department at *(512) 499-2146,* or visit their web site at www.ci.austin.tx.us/development/del.htm.

**Adopt flexible zoning standards.**

The City of Ogden, Utah, has adopted an infill housing ordinance that allows for innovative designs on small vacant central block parcels in the city. The ordinance allows smaller lot sizes to allow for greater density, provided the design takes into account the identity and character created by the development; the preservation of open space to encourage the interaction of residents; and the use of design features such as

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**A Policymaker’s Guide to Infill Development**

San Diego’s City Council approved transit-oriented development guidelines in August 1992 to encourage compact land use patterns.

(Cover from the San Diego TOD guidelines, City of San Diego)
Building Livable Communities

Fountains, plazas, theme lighting, recreational facilities and decorative entrances. For more information, contact John Mayer of the City of Ogden Planning Department at (801) 629-8933.

- Revise related codes and standards used in the development review process, including the subdivision ordinance, street drainage, and landscaping standards, and fire and building codes.

Zone for mixed uses.

Mixed-use development can invigorate a neighborhood center as well as a major downtown. Mixing uses helps to bring people within walking distances of jobs, services and recreational opportunities.

The City of Seattle adopted mixed-use zoning regulations in 1988, under which more than 1,400 housing units and over 255,000 square feet of commercial space have been built. The code contains strong incentives for furthering mixed-use development by allowing unlimited residential density within these projects. For more information, contact John Skelton, Department of Design, Construction and Land Use (DCLU), (206) 233-3883. Visit www.ci.seattle.wa.us/dclu for a copy of the code.

The City of Belmont, North Carolina, adopted a new, comprehensive zoning code that includes regulations for pedestrian orientation, street design, mixed use, landscaping and high-density development. The zoning regulations are more concerned with the appearance than with a strict delineation of uses. For more information, contact Elson Baldwin at (704) 825-5586.

Establish a transit station zone and increase allowable densities at sites adjacent to transit.

The City of Portland has a Light Rail Transit Station overlay zone with the purpose and intent of encouraging a mixture of residential, commercial, and employment opportunities within identified light rail station areas. The zone allows for a more intense and efficient use of land at increased densities for the mutual reinforcement of public investments and private development. The development regulations of the zone address: housing densities; minimum floor area ratios; park-and-ride design standards; building setbacks; ground floor windows; street-facing landscaping and pedestrian amenities; parking location; the maximum number of parking spaces; exterior displays; gates; drive-throughs and curb cuts. For more information, contact Amy Schwartz, Portland Communications Manager, at (503) 823-6143.

Outside of Portland, jurisdictions in nearby Washington County are actively planning for an extension of the growing light rail transit (LRT) system. Initially, an interim transit overlay zone was applied to areas within a 1/2-mile radius of the stations until the municipal code was updated to include sections that addressed individual transit districts in more detail. In July 2000, the code was expanded to include sections which identify nine kinds of transit-oriented districts by density and use, and which include transit-oriented design principles, standards, and guidelines. For more information, contact Senior Planner Paul Schaefer, Washington County, Oregon, at (503) 648-8817, or visit www.co.washington.or.us/deptmts/lut/plan97/comdev.htm for a copy of the municipal code.
Reduce parking requirements.

The City of Long Beach’s award-winning Downtown Parking Management Plan offers advantages to infill projects. Using the Urban Land Institute’s shared parking studies and specialized studies completed for the City of Long Beach, local officials concluded that, for qualified projects, a simple standard of three spaces per 1,000 square feet of commercial uses was sufficient to meet peak-hour downtown parking needs. For more information, contact Barbara Kaiser at the Long Beach Redevelopment Agency, at ☎ (562) 570-5957.

Promote shared parking.

TPG, the developer of The Crossings in Mountain View, California, proposed a shared parking lot for 200 cars between a shopping center and the nearby CalTrans station. The City justified the shared parking proposal because of the higher density and transit-orientation of the project. Caltrans supported the idea and allowed for the shared use of the parking spaces with the residents and the commuters. For more information, contact Mike Percy of the Mountain View Planning Department at ☎ (415) 903-6306.

Put a ceiling on the number of parking spaces allowed.

The City of Bellevue, Washington, has implemented a parking maximum for office development. The previous requirement of 5 spaces/1000 square feet was reduced to a maximum of 2.5 spaces. For more information, contact Julia Kruger at the Bellevue Department of Planning and Community Development, at ☎ (425) 452-2727.

Offer density bonuses.

State law in California requires local governments to grant 25% density bonuses and other incentives for senior and low- and very-low income housing. Density bonuses allow developers to build extra units beyond allowed densities if they meet certain public goals. Cities and counties can offer density bonuses to projects meeting local goals such as downtown revitalization, office/retail projects that provide a certain percentage of housing, and projects that are within a certain distance of transit stations/stops, or provide identified services such as child care.

Allow accessory units.

About 50,000 new rental units per year could be provided through accessory units, according to a survey of 47 communities in the U.S. that permit them. This housing is low cost and requires no government subsidies. Accessory units expert Patrick Hare estimates that one out of every three single-family homes, or about 15 million homes in the U.S., have enough space to accommodate an accessory unit. Zoning to

Pasadena’s “Main Street,” Colorado Boulevard, is a prime spot for revitalization through infill development. (Pasadena Downtown Urban Design Guidelines, June 1992, Kaplan/ McLaughlin/Diaz)
permit accessory units has been approved in cities including Westport and Greenwich, Connecticut, Boulder, Colorado, and Portland, Oregon, to name a few. Hare estimates that thousands of communities now permit second units. For more information, contact Patrick H. Hare Planning and Design at (202) 269-9334.

New residential development can also be designed to include accessory units. Aggie Village is a project that was built in Davis, California, in 1997 that consists of a 4.7 acre residential development and a combined 3.3 acre commercial space adjacent to the downtown. The site contains 21 single-family detached units and 17 accessory units that are located in the rear of the lots. The net density of the project is 16.8 units per acre, compared to the usual 4-5 units per acre in conventional development. For more information, contact John Yates at (530) 752-9803 or visit http://vcadmin.ucdavis.edu/Enterprise/sld001.htm.

In February 1998, Portland, Oregon, adopted an ordinance that allows homeowners to add accessory units. Accessory units are allowed within the Alternative Design Density Overlay Zone to foster compatible infill development and owner occupancy. The overlay zone allows households to use accessory units to supplement their income and makes allowances for home occupations. The ordinance is available online at www.planning.ci.portland.or.us/zoning.

*Provide some flexibility to building codes.*

The City of Seattle adopted mixed-use zoning regulations in 1988. However, because many projects in the area had vacant commercial space, the City commissioned a study of the mixed-use zoning standards to find out if code changes were needed. This resulted in adoption of amendments to the City’s Land Use Code geared toward increasing design flexibility for mixed-use projects. The amendments allow for smaller commercial spaces, separate commercial and residential structures on the same lot, and higher ceilings for commercial uses. For more information, contact John Skelton, City of Seattle DCLU, at (206) 233-3883.

*Allow transfer of development rights to encourage infill development.*

Transfer of development rights is used to reduce development in one area in exchange for increasing development elsewhere. The actual requirements for transfers can vary significantly from community to community, but this can be a useful tool in preserving farmland or individual historic buildings. In 1995, the City and County of Boulder, Colorado, adopted an intergovernmental transfer of development rights agreement, as part of a larger plan for adjacent cities and the county. Under the agreement, developers can skip the City’s growth management allocation process if they purchase one transfer of development rights (TDR) in the County for each housing unit they want to build in the City. Because of Colorado state statute, this equates to purchasing the development rights on 35 acres in the County for each housing unit desired. Once the TDR is purchased, the City and County jointly place an irrevocable conservation easement on the property. The goal is to help preserve agricultural land and open space in the County. The TDR also helps farmers lower their taxes, because the value of the property to which they sold the development rights drops when the development potential is limited. For more information, contact Pete Fogg, Director, County of Boulder Long-Range Planning Division, at (303) 441-3930.
ENCOURAGING REHABILITATION

Rehabilitate vacant buildings and reuse the upper floors of underutilized commercial buildings in downtowns and older business districts.

A downtown eyesore was eliminated and quality housing was provided through the rehabilitation of an historic building in Eugene, Oregon. The project includes ground-floor retail and 18 residential units. The financing package included a city loan of $350,000 using urban renewal funds as a second mortgage, and a bank loan of $825,000, with the remainder coming from the partners. In addition, the building was donated by one of the partners, and state and federal historic tax credits were obtained. Despite skepticism on the desirability of downtown living, the entire project was leased within 90 days of completion and has remained fully leased since then. The historic tax credits are credited with lowering the rent rates enough for the project to be competitive. For more information, call Brian Scott at Livable Oregon, Inc., at ☎(503) 222-2182.

The historic Denver Dry Goods Building, built in 1888 and located in downtown Denver, was renovated in the mid-1990s from an old department store into a mixed-use project. The City of Denver and the Denver Urban Renewal Authority purchased the vacated six-story building after learning of plans to demolish the building and turn the site into a parking lot. The 350,000 square-foot structure now contains affordable and market-rate housing, retail and office uses. For more information, contact Chuck Perry at Burgwyn, Perry & Rose at ☎(303) 446-0600.

Revise building codes and ordinances to support rehabilitation.

In 1998, the State of New Jersey adopted an award winning building code for the rehabilitation of old and historic buildings. The Rehabilitation Subcode is the nation’s first comprehensive set of code requirements for existing buildings and it contains all the technical requirements that apply to a rehabilitation project. Prior to adoption of the code, all rehabilitation work was evaluated on the cost and extent of alterations, resulting in rehabilitation that was often cost-prohibitive. Under the Rehab Subcode, the requirements that apply to a project are based upon the type of work being done rather than on the extent of the work. This allows for rehabilitation of a portion of an existing structure without requiring retrofitting of the entire structure. Buildings undergoing change of use no longer have to meet code requirements for new construction unless a greater hazard is created by the new use. The Rehab Subcode has been very effective. In the first year the code was in effect, rehabilitation work within New Jersey’s five largest cities increased by 60%. For more information, contact the New Jersey Department of Community Affairs, Division of Codes and Standards at ☎(609) 984-7609, or download the Rehab Subcode at www.state.nj.us/dca/codes.

Maryland has recently proposed a similar building code that would only require the portion of the building that is being rehabilitated to meet current code standards, instead of requiring a retrofit of the entire building.
The City of Los Angeles adopted an Adaptive Reuse Ordinance in 1999 to provide incentives for revitalization of the Greater Downtown LA area and to “encourage development of a live/work and residential community Downtown.” Incentives include exemption from: lot area requirements otherwise required by the zoning code; certain parking requirements; mini-Shopping Center and Commercial Corner Development regulations; and loading space requirements. For more information, contact Steve MacDonald at the Department of Building and Safety at ☎️(213) 977-6477.

**PROVIDING IN-KIND ASSISTANCE**

There are many other forms of assistance that cities can provide to help infill developers. Local governments can help by leasing space in new projects for city/county offices or purchasing goods or services from tenants in the new project. Other assistance may include lending city staff to projects, providing help with funding applications, encouraging lenders to make loans on targeted projects, enforcing sign and traffic ordinances, or sharing studies or marketing information.

Because existing marketing studies generally focus on the single-family home in the suburbs, the City of Seattle Planning Department and the Puget Sound Regional Council undertook their own marketing study to “determine how people can be attracted to reside in dense central cities in general, and ‘urban villages’ in Seattle in particular.” They found that 76% of the respondents preferred a single-family house over any other type of residence. However, 27% said they would be willing to live in higher-density housing if it provided the opportunity to own their own home, 18% more if it offered the various advantages of living near city centers, and 17% more if there were lower crime rates and higher school quality. For more information, contact Mark Gubranson, Director of Research and Forecasting, Puget Sound Regional Council, at ☎️(206) 464-7524.

**STREAMLINING THE PERMIT PROCESS**

Provide priority processing to infill developers.

In his “In-Town Housing” article, Rick Loessberg states that “because every month of review time represents another loan payment without any incoming revenue, another month on an expiring option, or another opportunity for interest rates to increase,” time is money to a developer. As a result, cities seeking to encourage infill housing must be willing to commit adequate staff and resources to ensure that infill projects are not stalled in the permit process.

Fast-track permitting benefited the developers of San Diego’s Uptown District. The City of San Diego owned the site and issued a Request For Proposals in November 1987. An exclusive negotiation agreement was entered into in February 1988, followed by hearings in May of 1988 and the close of escrow in June.
1988. Construction was complete by the end of 1989. This highly successful project was built on the site of a former Sears store in the Hillcrest neighborhood, located a few miles north of downtown San Diego. It has 320 housing units, a 42,500 square-foot grocery store with underground parking, an additional 94,500 square feet of commercial space, and a 3,000 square-foot community center. For more information, contact John Wilhoit at the City of San Diego, at ☎(619) 236-6006.

**Expedited permitting process can reduce lengthy delays.**

The City of Sunnyvale, California, adopted an expedited discretionary permitting process that applies to changes to zoning, use permits, and variances that require approval prior to the building permit. Under the expedited process, applications are accepted every other week. Each applicant is provided with a firm schedule that identifies the time lines (by specific date) for each part of the process and the developer is assured that the application will be addressed by the Planning Commission within five to six weeks from the initial application. Projects requiring the approval of the city council are assured of a review within an additional two weeks. By comparison, the time for processing permits in communities without an expedited process can take from four to six months. For more information on expedited permitting, contact Dana Wolfe of the Sunnyvale Planning Department at ☎(408) 730-7444.

The City of Sunnyvale also expedites building permits. The Express Building Permit process is over-the-counter, and 90% of all permits are issued in this process. Builders can consult representatives from building codes, planning, fire prevention, hazardous materials, public works and water pollution, and the permit is granted on the same day in most cases. For standard building permit applications, there is a guarantee of completion 21 calendar days from the date of submittal and another 10 days for subsequent revisions. While the city averages less than 21 days to issue permits, other cities normally take five to six weeks. For more information on expedited building permits contact Hamid Pouya, Sunnyvale’s Chief Building Official, at ☎(408) 730-7434.

**Create “by-right” zones.**

To “streamline” permit processing, consider increasing the range of projects that have “by-right” or “as-of-right” entitlements. “By-right” regulations are very precise. Projects must meet specified requirements of zoning regulations, and if those requirements are met, cities issue the appropriate permit “over the counter.” In contrast, development that must obtain special permits requires additional review and many have to go through public hearings. Applicants must demonstrate to public agency staff, citizens and decision-makers how their project meets the intent of the regulations. Cities should have thresholds under which smaller projects can be rapidly permitted, saving extensive reviews for larger projects and environmentally sensitive sites.

From a developer’s perspective, the primary benefits of “by-right” zoning regulations are the certainty that they offer and the speed by which permits can be obtained. From a community activist point of view, “by-right” zoning regulations may be frowned upon because members of the community have a reduced capacity...
to review and influence proposed projects. This makes proactive planning with extensive involvement of local citizens crucial, so that residents will trust that projects approved under “by-right” regulations will meet their expectations and preferences.

Make the process more efficient. Money spent going through bureaucratic channels means there is less available for landscaping and neighborhood amenities.

The City of Los Angeles improved public service and encouraged development in the city by streamlining its permit and entitlement process. Beginning in 1995, the following programs were implemented incrementally to make the process more efficient, business-friendly, and less confusing for customers.

➢ A Case Manager Unit was established to provide technical and administrative assistance to property owners and the building industry during the preliminary, design, approval, and construction stages of a project. This unit assists customers in interacting with various city departments and other governmental agencies involved in the development department.

➢ Express permit counters were established to process permit applications for jobs that do not require plan check. This program decreased customer waiting time and consolidated the permit issuance functions for building, electrical and mechanical permits.

➢ Automated customer traffic queuing systems were installed at the Construction Services Centers and other permit issuing offices. The system was designed to decrease customer waiting time and provide management control with a statistical tool to make informed decisions regarding counter operations.

➢ In 1999, the Los Angeles Department of Building and Safety launched a pilot program for fax permitting and e-permitting. The program allows customers to apply for simple permits online or via fax. For more information, contact Steve MacDonald, Head of Development Services, at ☎ (213) 977-6477.

Prepare Master Environmental Impact Reports.

Master Environmental Impact Reports (EIRs) can be used to assess the impacts and determine mitigation measures for a redevelopment, specific, or community plan. Subsequent projects that implement the plan may not have to conduct additional environmental reviews, or may be required only to focus on a few identified issues. The costs for the Master EIR may be recouped through project development fees, but may cost developers less than if full EIRs were required for each project, because of economies of scale and reduced time in the permitting process.

Master EIRs can also be used for policy or regulatory changes. For example, if a community adopts policies and amends its zoning code to allow mixed-use development, a Master EIR can be prepared, analyzing the impacts of the policy and zoning code changes and recommending mitigation measures. Any projects that comply with the regulations and are allowed in the new policies can then proceed without further review.
**Use GIS to locate properties available for infill.**

Geographic Information Systems (GIS) can be used to identify infill sites, particularly smaller sites that are scattered and otherwise hard to find. It can also streamline the information exchange necessary to expedite the transfer of city-owned parcels. In addition, GIS can be used to streamline the entitlement and permitting processes.

The City of Barstow, California, has been working on a GIS system to help them with infill development. They are in the process of linking their records management database with GIS software. They are scanning several thousand photos and plans into their database and are currently taking inventory of all city-owned vacant properties along with zoning and other information for the Economic Development Department. When fully operational, the system will automatically update these parcels as conditions change. Personnel from Economic Development will then be able to quickly show developers all vacant sites. This will streamline the system and eliminate a far lengthier and more complicated search of the main parcel database. For more information, contact Jennifer Riley, Barstow GIS coordinator, at (760) 256-3531.

**Reinvent the review process to account for the special case of infill development.**

Many current problems stem from the fact that one set of submittal requirements, one review process, and one set of development standards and criteria are applied to all development proposals, whether the development is sited in town or on the edge of town. The “system” seems to give the advantage to the larger, urban fringe developer. Cities may need to prepare a different set of submittal requirements and review criteria, and create a different review process for infill development.

**Providing Public Services**

**Protect the area that you are targeting for infill.**

Make certain that police service is adequate, and utilize code enforcement and other measures to keep vacant properties and streets clean and unblighted. According to downtown Dallas developer Robert Shaw, “Urban environments have advantages and disadvantages, but they do not just survive on their own. They have to be nurtured and cared for.” (Loessberg, 1995)

At the request of a majority of area property owners, the City of Los Angeles renewed a property based assessment district in the downtown Fashion District. Funds from the five-year assessment are dedicated to improving maintenance, safety, and marketing programs designed to counter the perception of crime, graffiti, blight and related problems facing the area. The 82-block district was based on a successful pilot business improvement district (BID), formed by the property owners themselves in an 18-block area. The Fashion District BID operates radio-equipped bike patrols to monitor street activity, serve as community ambassadors, and work with law enforcement in dealing with criminal activities. To market their work, they created a web
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site www.fashiondistrict.org, and distributed 30,000 updated map guides. Property values have increased, as well as the number of pedestrians, shoppers, new tenants, and new construction projects in the District. For more information, contact Kent Smith, the Fashion District's executive director, at (213) 488-1153.

Use public investments in streets, infrastructure, and public amenities to improve targeted areas, and encourage retail success and additional private investment.

Porterville, a city of approximately 36,000 in California's San Joaquin Valley, is in the midst of several exciting infill projects. The City has formed a partnership with the local school district to develop abandoned railroad property in a low-income neighborhood for a new elementary school and a neighborhood community center. Also, in the surrounding area, the Redevelopment Agency has targeted low and moderate income housing funds for first-time home buyer assistance and rental construction projects. In addition, the City has issued $20 million in Certificates of Participation for street and bridge improvements throughout the city, including a major arterial adjacent to the school/community center project.

The City continues to support downtown revitalization with assistance for new County offices which will fill an empty bank building, plus construction of additional office space adjacent to it. A $1 million HOME grant will help convert an historic downtown building into a mixed use project with 14 units of low and moderate income housing and three retail spaces facing Main Street.

Community Development Block Grant funds will also be utilized to install infrastructure improvements in a lower income, older neighborhood close to the downtown area. These improvements include new curbs, gutters, sidewalks, street lighting, and sewer and water line replacement. Recently, the City won the Award of Excellence from the California Association of Local Economic Development for its assistance to Foster Farms to locate a food processing plant in a vacant industrial building in the center of the city. Ten million dollars in improvements have been made to the property, turning a blighted area into a very attractive business location, which will eventually employ 300 people. The City is also working on a Rails-to-Trails project which will run through the middle of the city. For more information regarding these projects, contact Denise Marchant, City of Porterville at (559) 782-7460.

The Denise Hunt Townhomes were developed in Seattle to provide housing for low-income families. Several market-rate infill projects have since been built on vacant or underused land nearby.
ADDRESSING BROWNFIELDS AND TOXIC CONTAMINATION

Hazardous contamination of urban properties is a serious impediment to infill development. The problem stems from the fact that parties can be held liable for clean-up under the Superfund law if they own a piece of contaminated property, even if they had nothing to do with the contamination. Understandably, there are few buyers and lenders willing to undertake such risks, and old industrial zones of cities are being abandoned.

The U.S. Environmental Protection Agency (EPA) describes brownfields as “abandoned, idled, or under-used industrial and commercial facilities, where redevelopment is complicated by real or perceived environmental contamination.” To help reuse these sites, in 1995, the United States Environmental Protection Agency (EPA) launched the Brownfields Economic Redevelopment Initiative which issued guidelines on site clean-up, but left it up to the states to determine how to go about decontamination. Since the initiative, the number of states with brownfield programs has increased more than tenfold. Brownfield issues continue to evolve rapidly and success stories are more and more common. According to Brownfield News, 1999 was used as a settling-in period for voluntary cleanup programs – finalizing policies and rules, and allowing the programs to take hold and operate at the project level.

According to the U.S. General Accounting Office, “450,000 brownfields sites exist in this country, affecting virtually every community in the nation.” Other sources estimate the number of sites to be closer to 600,000. A report presented by the U.S. Conference of Mayors in 2000 found that 201 cities had 21,000 brownfields sites, and of those that could estimate acreage, 201 cities had more than 81,568 acres of abandoned or under-used properties. In that same report, it was estimated that 187 cities would receive between $878 million to $2.4 billion in additional annual tax dollars and create more than 550,000 jobs if their brownfields sites were returned to productive use. By redeveloping brownfield sites, 118 cities said they could support more than 5.8 million people in their cities – a population nearly equivalent to the population of Chicago and Los Angeles combined. According to HUD Deputy Secretary Saul Ramirez, by redeveloping the nation’s five million acres of brownfields – an area the size of Maryland – the U.S. could support an additional 45 million homes.
While there are still risks associated with brownfield development, recent increases in federal programs and funding, state and local initiatives, and organizations specializing in brownfield issues have eased funding shortages and associated liability.

**Adopt a holistic approach that looks beyond the brownfield site.**

State and local governments that have attempted infill and redevelopment of brownfield sites have faced several obstacles due to the contamination and associated liability. This uncertainty of liability has forced developers who might have contemplated brownfield development to build in outlying pollution-free suburban or exurban greenfields instead.

While states like Oregon have passed legislation that hold developers harmless for pollution of a site by a previous owner, local governments can also help by thinking about all the actions that act as impediments to redeveloping brownfield sites. As Randy A. Muller of *Brownfield News* indicates, local governments need to “stop compartmentalizing various environmental regulatory programs and initiatives. Urban sprawl, brownfields, sustainable development, clean air and water are all aspects of environmental responsibility that need to be moved in the same, not competing, directions.” Public-sector support for brownfield redevelopment can offer incentives to private developers and act as the catalyst for environmental restoration and urban infill.

**Use federal programs to make a difference at the local level.**

The Brownfields Economic Redevelopment Initiative, coordinated by the EPA, supports national organizations that help educate and organize all levels of government and other stakeholders on the cleanup of brownfields. The initiative establishes demonstration pilot programs to help local governments participate in the cleanup and redevelopment of contaminated sites. Pilots are eligible for up to $200,000 “to support creative two-year explorations and demonstrations of brownfield solutions.” For more information on the EPA Brownfields Initiative, log on to [www.epa.gov/brownfields](http://www.epa.gov/brownfields).

The Brownfields National Partnership helps to implement the Brownfield Initiative and make it more effective by coordinating different agency resources and organizations. The partnership, consisting of the Department of Housing and Urban Development (HUD) and more than 15 federal agencies, offers financial and technical assistance to organizations and agencies involved in brownfields redevelopment. HUD’s Brownfield Economic Development Initiative (BEDI), in combination with Community Development Block Grants, help with local brownfield recycling efforts. In 1998, more than $25 million in BEDI competitive funding was made available for brownfield redevelopment. For more information, call the HUD Brownfield Hotline at ☏(800) 998-9999.

The U.S. Department of Energy (DOE) has launched an initiative that aims to recycle brownfields through conversion to “brightfields.” The DOE initiative defines “brightfields” as the conversion of contaminated sites into usable land by bringing pollution-free solar energy and high-tech solar manufacturing jobs to these sites. This includes the placement of photovoltaic arrays that can reduce cleanup costs, building integrated solar systems as part of redevelopment, and siting solar manufacturing plants on brownfields. In an effort to advance economic development and improve environmental conditions, the City of Chicago has...
prepared a plan for brightfield development that will include solar panel manufacturing and the creation of 100 new jobs on a former brownfield site. The DOE has also begun work with cities in California, Virginia, Minnesota, New York, and Connecticut.

Support state comprehensive brownfield programs.

State governments have passed legislation to facilitate the redevelopment of polluted sites, to counter the uncertainties of environmental law, and to address financial assistance such as tax credits or grants. The following are a few of the state programs that have resulted in successful brownfield cleanup and redevelopment.

The state program in Minnesota directs the regulatory agencies to simplify the cleanup process by initiating one-stop-shopping programs that address brownfield issues, and in some cases by assisting in locating the funds necessary for cleanup and development of some sites. In 1995, the state signed off on a memorandum of agreement with the U.S. EPA. The agreement assured that those who successfully completed cleanup under the 1998 Voluntary Investigation and Cleanup (VIC) program would not be subject to federal enforcement action. This had the effect of assuring participants in the VIC program about the extent of their environmental liability.

The state of Minnesota used the program successfully to assist the Brighton Development Corporation in a cleanup of the Marquette Block at St. Anthony Falls. The state certified the cleanup, which allowed the developers to secure financing for the development. For more information, contact Kristin Luke of the Minnesota Pollution Control Agency at (612) 296-8407, or check out their website at www.pca.state.mn.us/cleanup/vic.html.

Maryland’s Brownfield Cleanup/Smart Growth Program is unique because it simultaneously encourages brownfield cleanup and protection of greenfields. Under this program, state funding is related directly to development decisions. Priority Funding Areas reflect a policy to fund existing communities where infrastructure is already in place. One of the five major points encourages the use of abandoned industrial sites over the use of open spaces. The program holds any developer harmless from liability over preexisting site contamination. In some cases the state will assist in the clean-up. For more information, contact Ronald Young, Deputy Director of the Maryland Office of Planning at (410) 767-4505.

Create strong local brownfield initiatives.

There is no single, one-size-fits-all approach to brownfield policy and development. Each city has its own history, economy, and environment that determines the creation of and, consequently, solution to brownfields. Likewise, each city has its own development needs which will determine local brownfield policy. For example, redevelopment of brownfields may be the only option for older cities in the northeast, while cities in the western states may have a different palette of options. The fact remains that local brownfield initiatives will vary greatly according to the needs and resources of the locality.
The impact of proactive state policy at the local level can be seen in the Belmont Dairy project in Portland, Oregon. This was an adaptive-reuse project developed by Belmont Dairy, a Limited Liability Corporation (LLC). The project was complicated by the presence on the site of PCBs, lead-based paint, petroleum contaminants, and asbestos. The disclosure of the contamination, in turn, made it difficult to obtain financing.

The key to the project’s success was negotiation with the Oregon Department of Environmental Quality (DEQ) for a first-ever Prospective Purchaser’s Agreement (PPA), which limited the purchaser’s liability for environmental cleanup of the property. The PPA protected Belmont Dairy LLC against any future environmental pollutants discovered from past activities. It was the key to the lenders finally approving the loan, and it was also the key to the overall success of the project. The site was cleaned up at a cost of $200,000 to the developer. The adaptive-reuse was completed on the abandoned milk processing plant, which is now a mixed-use center with retail and residential uses in the heart of Portland’s Sunnyside neighborhood. For more information, contact Doug Obletz of Shiels, Obletz, and Johnson at (503) 242-0084, or Alan Kiphut of the Oregon Department of Environmental Quality at (503) 229-6834.

Established in 1998, the Seattle Brownfields Program primarily consisted of reforms and incentives. However, since then the program has begun to look at larger issues of environmental restoration, including addressing chinook salmon endangerment. The EPA and Army Corps of Engineers began developing a model program that combines the Corps habitat and watershed responsibilities with the EPA brownfield concerns. Under the program, the Port of Seattle completed a cleanup effort that included shoreline restoration and industrial redevelopment. Based on the program’s initial success, this model is being considered for national brownfield development.

The Emeryville, California, Brownfields Initiative consists of a multi-pronged approach to encourage the redevelopment of brownfield sites in this San Francisco Bay Area city. As part of the initiative, the city provides GIS systems and accessories that include an environmental GIS map of the city. The project also includes a provision for one-stop-shopping -- developers can visit a city office, and receive information on any parcel, including any available information on recommended environmental testing.

The city has also developed a Mitigation Risk Management Plan (MRMP). Under this plan the city will consider taking over the groundwater issues on a site -- with groundwater management paid for by special city mitigation -- and leave the developer responsible only for the soil cleanup. The city acts as an “intermediary” between the owners/developers and the regulatory agencies, and will process the required regulatory sign-off for the smaller cleanup sites. This gives “teeth” to the one-stop-shop process and in the end should promote more infill development on the smaller sites. The city of Emeryville also offers financial assistance and tax incentives for infill development. For more information, contact Ignacio Dayrit, Emeryville Department of Economic Development, at (510) 596-4356, or look for the pilot project on the City’s web site at www.ci.emeryville.ca.us.

Establish financing mechanisms to pay for brownfield assessment and cleanup.

In Chicago, Illinois, under the City’s Environmental Loan Program, banks will lend up to $150,000 for brownfield assessments and audits to determine compliance costs, for consultant fees, or for capital
improvements. Both Cook County and the State of Illinois offer tax incentives; the state allows a tax credit of up to $40,000 annually with a cap of $150,000 per site, while the county offers a 55 percent annual tax savings.

Chicago started a brownfields initiative in 1993 to address the issue of cleanup and redevelopment. The city cleaned up and developed five city-owned brownfield sites for less than half of the $2 million budget. They then created the Chicago Brownfield Forum, a public/private partnership consisting of representatives from the departments of Environment, Planning and Development, Buildings, Law, and the Mayor’s Office, in an effort to identify barriers to private redevelopment. The City has since expanded to 20 brownfield sites that are now urban industrial parks. The City identified 65 action projects to promote brownfield redevelopment which include lending policy changes and tax incentives. Finally, a set of Brownfield Redevelopment Principles was adopted by the city to help guide Chicago in revitalizing older communities. For more information, contact Jessica E. Rio of the Chicago Brownfields Forum at ☎(312) 744-8692.

In cooperation with the EPA, the city of Dallas, Texas provides technical support and financial assistance to developers. No-cost Phase 1 and Phase 2 Environmental Site Assessments are available to eligible properties. A Brownfield Cleanup Revolving Loan Fund, consisting of a $350,000 EPA grant and City matching funds, offers short-term, low-interest loans for cleanup of eligible sites. For more information, contact Marilyn Avinger at ☎(214) 670-1686.

Provide pooled environmental insurance as stimuli for increased brownfield redevelopment.

Environmental Insurance can reduce uncertainties associated with brownfield redevelopment by limiting liability associated with the discovery and cleanup of contaminated brownfield sites. A 1998 HUD report found that private sector demand for Environmental Insurance is growing rapidly and that municipal governments can promote urban infill and redevelopment through their ability to create pools of environmental insurance. Under a pooled Environmental Insurance policy, a municipality identifies groups of properties that benefit from the economic benefits of risk-sharing and encourages current owners to buy group coverage to make their sites more marketable. Alternatively, a municipality or economic development organization purchases coverage for pools and makes the protection available to purchasers and redevelopers of brownfield sites. At least five types of Environmental Insurance have been identified, and each plays a different role in risk management and loss prevention. They include coverage for professional liability, owner/operator liability, cleanup cost-cap, legal defense, and re-opener/regulatory action. For more information on environmental insurance, log on to www.huduser.org:80/publications/econdev/envins.html.

Consider turning brownfields into Eco-Industrial Parks.

Some communities have devised plans to develop brownfields for use as eco-industrial parks (EIP). Modeling industrial systems after ecological systems, Industrial Ecology reduces costs through waste
Building Livable Communities

Reduction and elimination. The premise is that one person’s “waste” is another’s feedstock. Eco-industrial parks will work anywhere, but the development of EIPs in brownfields minimizes environmental impact and demonstrates responsibility and the ultimate dedication to recycling. According to Ed Cohen-Rosenthal, director of the Work and Environment Initiative at the Cornell University Center for the Environment, “EIPs are an appealing redevelopment option for brownfields because they offer the community sustainability, economic growth and lower environmental impact than traditional industry.”

The Port of Cape Charles Sustainable Technology Park was one of the first four EIPs selected as a national model by the President’s Council on Sustainable Development in 1996. Located in Northampton County, Virginia, the site lies partially on a former hazardous waste disposal site which overlooks the Chesapeake Bay. Half of the approximately 300-acre site consists of brownfields and half consists of greenfields. The EIP will maintain high water quality and will be home to a new solar products firm and a small firm that makes desalination devices. Like other EIPs, the Sustainable Technology Park is a model for both environmental and economic sustainability. For a summary of the Port of Cape Charles Sustainable Technology Park, visit the President’s Council on Sustainable Development web site at: www.whitehouse.gov/PCSD/Publications/Eco_Workshop.html.

The Northwest Louisiana Commerce Center (NLCC) is a proposed EIP on the site of the former 15,000 acre Louisiana Army Ammunition Plant near Shreveport, LA. Using existing infrastructure – including 700 structures, 65 miles of railway, 100 miles of road, and 12,000 acres of well-managed mixed-forest – and a collaborative ecological design process, the EIP will serve as an efficient and ecologically intelligent model for base re-use. The NLCC will utilize Permaculture design, an interdisciplinary system of design that mimics natural systems, to maximize the productivity of both environment and industry. The NLCC is being marketed to commercial tenants through the Armament Retooling and Manufacturing Support (ARMS) Program, which will provide a range of federal incentives to businesses willing to locate on a former ammunition production facility. The state of Louisiana will also offer incentives, including exemption from state property taxes and a 10-year exemption on local property taxes. For more information, visit the NLCC’s web site at www.nwlcc.com.

EIPs are being developed in Baltimore, Dallas, Atlanta, the South Bronx, and Youngsville, North Carolina. For a list of EIPs and what’s happening with some of them, contact the Smart Growth Network at ☎ (202) 260-2750, or check out their web site at www.smartgrowth.org.

Promote equitable brownfield development.

Brownfields are often located in economically depressed areas of the city. Compounded with the fact that cost of cleanup is difficult to recover, the most marketable sites – such as sites in prime retail or residential areas – are often the ones to undergo remediation. Meanwhile, sites in areas with depressed property values may linger as a public health threat for many years. The formation of a local land bank authority – a non-profit entity established by a city or county – can be used as a mechanism to address overlooked brownfield properties. Under federal guidelines, involuntary acquisition (say, for tax-delinquent properties) of brown-

Overlooking Chesapeake Bay, the Port of Cape Charles Sustainable Technology Park in Northampton County, Virginia, is a model for both environmental and economic sustainability.
fields is exempt from liability associated with contamination. With the obstacle of liability removed, land banks can form community land trusts that focus on brownfield redevelopment efforts.

Dudley Street Neighbors, Inc. (DSNI) – a non-profit representing a multi-ethnic neighborhood from a 1.5-square mile area in Boston’s Roxbury District – received the power of eminent domain to acquire blighted properties. Since 1998, DSNI has purchased 52 parcels of land from 40 absentee landowners. So far, nearly 300 new units of housing have been built, and of the 1,300 original parcels of vacant land, about 500 have seen permanent improvement. Among many accomplishments, DSNI has closed illegal trash transfer stations and identified 17 hazardous waste sites in the neighborhood for state cleanup. While a land bank may take a city-wide (and a market-based) approach to land acquisition, DSNI targeted its own neighborhood as a way of promoting equity and encouraging redevelopment. For more information, visit www.indepsec.org/pathfinder/innovations/housing/dud_str.html.

Connect with organizations that are working on brownfield issues.

There are a number of national, regional, state and local organizations that can assist local governments in addressing brownfields.

The Northeast Midwest Institute is a nonprofit working on brownfield issues as they relate to economic development. The Institute is a research organization dedicated to economic vitality, environmental quality, and regional equity for Northeast and Midwest states. Formed in the mid-1970’s, it fulfills its mission by conducting research and analysis, developing and advancing innovative policy, providing evaluation of key federal programs, disseminating information, and highlighting sound economic and environmental technologies and practices. The Northeast Midwest Institute is also working on a "Smart Growth" handbook that will address dual-issues of brownfield redevelopment and containing suburban sprawl. For more information, contact Elizabeth Collaton of the Northeast Midwest Institute at (209) 544-5200, or check out their web site at www.nemw.org.

The California Center for Land Recycling (CCLR) is an excellent resource on brownfields issues in California. CCLR has provided assistance to many local government coalitions in California, and can share case studies of many successful brownfield projects throughout the state. Some examples include: building affordable housing in San Diego on the site of a metal plating facility; converting a Maywood industrial site near Los Angeles to a park; developing infill partnerships in northern California’s East Bay; assisting the City of Pacifica with future uses of an abandoned sewage treatment plant; and, planning for the adaptive reuse of a lumber mill in North Fork. For more information contact Russell Mechem, Brownfields Program Director at (415) 820-2080, or check out their web site at www.cclr.org.

The Brownfields Non-Profits Network is a network of non-profit organizations helping to promote the redevelopment of Brownfield properties throughout the United States. Their web site provides links to many organizations working on brownfield issues. Log on to www.brownfieldsnet.org for more information. CCLR’s web site provides a thorough list of non-profit and government links to organizations and agencies involved in brownfields. The Institute for Responsible Management (www.instrm.org) is another organizations that can assist local governments interested in brownfield redevelopment.
Urban Ecology is a non-profit organization, founded in 1975, that aims to make cities that are ecologically thriving and socially just. Urban Ecology’s Progressive Development Network is a groundbreaking effort to bridge the traditional divide between developers and environmentalists. Through the Progressive Development Network, Urban Ecology offers a guide to infill developers who work to redevelop brownfields, incorporate ecological design, build affordable housing and mixed-use development projects, and orient development toward transit. For more information or a copy of the Infill Developers Portfolio, contact Urban Ecology at ☎(510) 251-6330.

The International City/County Management Association (ICMA) is a leader in local government-driven Smart Growth, brownfields, Superfund, and base reuse activities. In 1994, the ICMA founded the Brownfields/Superfund Consortium to evaluate Superfund and brownfields programs, generate options for federal reform, and to address the role of local government in making future land-use decisions. In cooperation with the 1999 U.S. EPA Superfund Redevelopment Initiative, ICMA established the Superfund Peer Match Program for local governments. The program enables local governments that have succeeded in reusing Superfund sites to share their experiences with those just starting the process. For more information on the consortium, peer match program, and brownfields activities, log on to www.icma.org or check out the “Hot Topics” pages on the Local Government Environmental Assistance Network at www.lgean.org. The ICMA recently published “Putting the Pieces Together: Local Government Coordination of Brownfield Redevelopment” and “Beyond City Limits: Best Practices from ICMA’s 1998 Brownfields Peer Exchanges;” the executive summaries of the reports are available at www.icma.org/issuesintersection/brownfields.cfm, or to order the reports, call ☎(800) 745-8780.

In collaboration with the Smart Growth Network, ICMA published a series of Infill Financing Fact Sheets that focus on integrating transit, open space, and small-scale redevelopment projects. For a collection of reports focusing on financing infill and brownfields redevelopment, visit www.smartgrowth.org/issueareas/cities_fiscal.html.
A CHECKLIST FOR CREATING INFILL DEVELOPMENT

The following is a checklist – developed by the National Main Street Center – of some of the strategies suggested above and additional ideas you can use to encourage infill projects:

REDUCE COSTS AND/OR CASH REQUIRED

- Grant money for acquisition
- Grant money for construction rehabilitation
- Grant money for soft costs
- Condemnation
- Pressure on owners to sell
- Ease regulations
- Land cost write-downs
- Relocation fund
- Waive transfer tax
- City staff professional services
  - Engineering
  - Planning
  - Financial packaging
  - Grant applications
- Historic district commission professional services
  - Architectural
  - Tax credit application
  - National Register nomination
  - Certified local government application
- Infrastructure improvements
- Property in exchange
- City labor contributed to project
- City materials contributed to project
- VoTec school labor
- Payment of project fees
- Tax increment financing district
- Zoning variances
- Equity participation
- Leveraging other money sources
- Conduit for other monies
- Single office (person) for developer to work with
- Cut through red tape
- Site clearing
- Refundable advance of front-end fees
- One architect for public and private improvements
- Provision of easements
- Donation of property to development organization
- Adoption of historic preservation building code provisions
- Access to buying sources

INCREASE INCOME

- Rent subsidies
- Public occupancy
- Sandwich lease
- Occupancy guarantees
- Bonus payments on occupancy
- Purchase goods/services from project
- Buy information from project – market study, marketability study

The plan for infill development for a targeted area is the result of many layers, including zoning, urban design, transportation and capital improvements, open space, community facilities, and traffic and parking.

**REDUCE EXPENSES**
- Local tax credit
- Marketing assistance
- Vacancy subsidies
- Utility Costs
- Property tax rebates
- Property tax assessment adjustments
- Transportation assistance
- Provide snow removal
- Expense subsidy
- Maintenance
- Property tax abatement
- Provide management services
- Buying pool access

**REDUCE FINANCING COSTS**
- Direct low-interest loans
- Interest write-down with traditional lender
- Special assessments for improvements
- Loans to lenders
- Compensating balances
- Term subsidy
- Loan guarantees
- Industrial revenue bonds
- “Pressure” on lenders to fund appropriate projects
- Contingency take-out financing
- Bridge loans
- Subordination of debt interests
- Payment of financing fees

**IMPROVE ECONOMIC AND INVESTMENT ENVIRONMENT**
- Enforce building codes
- Pressure owners to maintain and/or improve property
- Build parking lot or garage
- Meter or unmeter parking
- Alter comprehensive plan
- Historic district designation
- Business assistance to tenants
- Public improvements
- Public expenditures amenities
- Create enterprise zone
- Acceptance of facade easements
- Reinvest development fees in project area
- Reinvest business license fees in project area
- Height and density restrictions
- Park and common-area development
- Down zoning
- Incentive zoning
- Adopt and enforce sign and building design ordinances
- Traffic management

**IMPROVE INFORMATIONAL ENVIRONMENT**
- Provide consultant studies
- Provision of commercial activity information from business tax reports
- Maintain building and business inventory
- Track changes in property valuation, investment activity

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Make a full inventory of your community’s resources as well as the various planning and financial requirements that might be brought to bear on creating infill development in your community.

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