## NOTICE: WARNING CONCERNING COPYRIGHT RESTRICTIONS



- The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material.
- Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specific "fair use" conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

# When City and Country Collide

## Managing Growth in the Metropolitan Fringe

Tom Daniels

## **ISLAND PRESS**

Washington, D.C. • Covelo, California

#### Copyright © 1999 by Island Press

All rights reserved under International and Pan-American Copyright Conventions. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher: Island Press, 1718 Connecticut Avenue, N.W., Suite 300, Washington, DC 20009.

ISLAND PRESS is a trademark of The Center for Resource Economics.

Library of Congress Cataloging-in-Publication Data Daniels, Tom.

When city and country collide : managing growth in the metropolitan fringe / Tom Daniels.

p. cm.

Includes bibliographical references and index.

ISBN 1-55963-597-5 (paper)

1. Metropolitan areas—United States—Planning. 2. Regional planning—United States. 3. Land use—United States—Planning. I. Title.

HT334.U5D35 1999 307.1'216'0973-dc21 98–42236 CIP

Printed on recycled, acid-free paper

Manufactured in the United States of America 10 9 8 7 6 5 4 3 2 1

## (44) TER 7

## Divided We Sprawl: The Role of State and Local Governments

Township, county, and state programs need to work together to achieve a balance in planned land use to meet all goals and provide a future for the next generation.

-Citizen, Cuyahoga County, Ohio

Unchecked sprawl has shifted from an engine of California's growth to a force that now threatens to inhibit growth and degrade the quality of life.

> -Beyond Sprawl: New Patterns of Growth to Fit the New California (1995)

Suburban sprawl fans out from every major American city, and, in most places, it will continue to eat into fringe areas. At the same time, scattered low-density residential and commercial sprawl will consume bits and pieces of the outer-fringe countryside. Sprawl does not further the national goals of racial integration, energy efficiency, affordable housing, environmental quality, or economic competitiveness. Yet the federal government has given state and local governments little direction about how to control sprawl. Instead, federal tax policies, regulations, and spending programs have been powerful contributors to sprawl.

Decisions about land use are made mainly by municipal and county governments. These local governments need to understand how their comprehensive plans, property tax policies, zoning regulations, and spending programs induce sprawl. But as Henry Diamond and Patrick Noonan point out, "Many communities continue to rely on a legislative framework that was created for a very different pre–World War II America. As a result, the planning and growth management mechanisms in force in most states in the 1990s are woefully out-ofstep with the times."<sup>1</sup>

## Box 7.1 A Survey of Opinions About Land-Use Planning in New York State

New York is a home-rule state, which means that the 1,530 local governments can enact comprehensive plans and adopt zoning, subdivision, and site-plan regulations for private property within their borders.

In 1993, Pace University Law School asked the consulting firm of Kinsey and Company to conduct a survey of opinions about land-use planning in New York.<sup>2</sup> Over two thousand local officials, planners, and developers responded to the survey. Over half (57 percent) said the current land-use planning system was unacceptable, and only 16 percent rated it acceptable.

The main complaints concerned poor use of infrastructure dollars, poor location of business activity, lack of affordable housing, weak protection of agricultural land, and loss of community character.

Respondents reached a general consensus on the following ways to improve land-use planning:

- Tie local plans with county or regional plans.
- Land-use planning needs to precede regulations.
- · Integrate land-use planning and infrastructure planning.
- Coordinate state and local infrastructure budgets.
- Make land-use planning more orderly and logical.

Meanwhile, state agency spending programs play a powerful role in influencing the location and intensity of development. State infrastructure projects, such as sewer and water facilities and roads, promote economic growth and often encourage sprawl. On the other hand, state and federal environmental regulations can restrain growth while protecting air and water quality and natural resources. But state agency plans and programs are rarely coordinated with each other or with local comprehensive plans.

Comprehensive plans are meant to be the foundation of a community or county growth management system, but many state planning and zoning enabling laws do not clearly spell out that a comprehensive plan should be the basis of the zoning ordinance and other growth management techniques, or that the plan and the implementing ordinances and infrastructure spending programs should be consistent. Nor is there a requirement that the comprehensive plan and zoning ordinance be kept up to date. Reform of state planning and zoning enabling laws is long overdue. Local governments need to make sure their comprehensive plans and land-use ordinances are timely and can produce compact, cost-effective, and sustainable development. An added benefit in reforming and updating growth management statutes and ordinances is that state and local governments can work to offset the federal influences that encourage and even reward sprawl.

## State and Local Government Actions That Contribute to Sprawl

The following examples of poor growth management are meant not to place blame but rather to serve as a warning of the results of ineffective planning, counterproductive tax policies, and short-sighted spending programs by state and local governments. Identifying the problems with government growth management is the first step toward devising and implementing solutions.

#### Lack of Coordination among Local Governments

Planners can easily become frustrated as they attempt to devise a comprehensive land development and land protection program in a fringe community or county. Chapter 3 discussed the major barriers to effective, coordinated, long-term development and land conservation strategies. The biggest problem is perhaps the most intractable: the overlapping jurisdiction of different governments, authorities, and regulatory agencies making piecemeal and often redundant claims over policy making and development permissions in the fringe. Although the structure of local, regional, and state governments varies considerably, it is not uncommon to have several separate entities, each with its own agenda, active within a single township, municipality, or county.

Many problems in the fringe are regional. Landfills, water supplies, agricultural land protection, highway networks, and large developments of regional impact almost always require the cooperation of two or more local governments to implement solutions. Most states have missed opportunities to bring local governments together to undertake regional efforts for economic development, infrastructure, and environmental protection.

### Sloppy Planning

Anyone who drives down a miracle mile of franchise outlets amid a sea of parking lots and a forest of signs, or who passes a subdivision

of houses that face in awkward directions, might ask why they should have any faith in public planners or private developers.

In his book *A Better Place to Live*, Philip Langdon pulls no punches about weak planning efforts by local governments. He cites three widespread examples of why poor planning occurs:

- 1. Planning failures have lowered the ambitions of planners. Planners work for politicians, who are usually cautious and reluctant to "plan big." Because planning is a political process, politicians often feel the need to have sufficient "political capital" in the form of public opinion polls, petitions, or coalitions of interest groups behind them before they push for strong growth management measures. Usually, it takes a crisis or several years of organizing to amass sufficient political capital. But if these growth management efforts fail, planners and politicians get the blame and risk losing their jobs. Failure breeds reluctance to take bold planning measures, even when they are needed.
- 2. Planners can be heavily influenced by commercial and business interests. Economic development is a main goal of many local politicians. For instance, the strip commercial development that results from local government planning and zoning appears not much different from what the private market would produce without government planning. So why have government land-use planning?
- 3. Planners tend to focus on the planning process rather than on how their plans and regulations can shape specific projects and overall land-use patterns. Planners have become, in Langdon's words, "application-accepters" and "permit-dispensers."<sup>3</sup> They spend little time assessing the cumulative impact of the recent and proposed development projects on community services and land-use patterns.

Why then should anyone expect things to be different any time soon? Many local and state governments are remarkably parochial. If an idea does not originate in their state, county, or municipality, it is suspect. When a new planning technique from the outside is discussed, locals tend to say, "That may work for you, but we could never do that here." This kind of defeatist attitude, identified by Philip Langdon, has retarded planning efforts in many communities, as well as attempts at regional planning. In addition, county and municipal attorneys have often obstructed the adoption of new planning techniques by warning about legal challenges that could cost the local government. And in some states, a basic problem is outdated planning laws. For example, in Pennsylvania, a local zoning ordinance does not have to be consistent with the comprehensive plan. This means that the zoning can defeat the purpose of a carefully drafted plan that reflects thoughtful studies and citizen input. The comprehensive plan might include goals for enhancing existing village centers and protecting open space, but the zoning ordinance might allow sprawling residential lots and commercial highway-strip development throughout the countryside.

Because elected local officials normally make the final decision about development proposals, planning is a political process. Yet America is facing a political crisis of leadership, not only in Washington, but also at the state and local levels. Distrust of government runs high. Many elected and appointed officials have noted a reduction in the civility of public debate, and some of the rancor and distrust is well deserved.

A valid charge against local planning is that it is frequently so flexible as to appear incompetent, reckless, and downright corrupt. Decisions of planning commissions and elected officials can mean windfalls to some property owners and a wipeout of property value to others. When local planning commissions and elected officials routinely approve special exceptions, variances, and rezonings, they weaken the planning process, and citizens lose faith in the local government's commitment to managing growth. After successfully pushing for uniform local zoning codes in Rhode Island, homebuilder Robert Cioe explained, "We wanted to make it difficult for the zoning boards to make political decisions for their friends."<sup>4</sup>

In describing the planning and development struggles in Saratoga Springs, New York, James Howard Kunstler refers to the pro-growth advocates as "an efficient local land development machine made up of lawyers, bankers, realtors, and speculators, dedicated to maximizing their short-term profits at the expense of the town's future."<sup>5</sup> Implied here is a lack of *community vision*, and without a vision, planning efforts really have no direction.

## Ineffective and Separatist Zoning

All too often, the planning process is, in the words of Rutherford Platt, "reactive, negative, and supplementary."<sup>6</sup> Developers present projects and wait for a response from the planners and elected officials. The zoning regulations that govern development mostly emphasize inflex-

ible, negative rules, rather than encourage creativity. The developer has pretty much decided what to do with the property—have the planning process and zoning ordinance provided good direction?

The comprehensive plan, which should guide development, all too often sits on the shelf. Zoning ordinances are permissive about density yet rigid on permitted uses and development design. The frequent result is similarly sited houses on cookie-cutter lots. Many American towns built in the nineteenth century could not be built today. They would violate their own zoning ordinances. This is a major problem that New Urbanists face when proposing mixed-use developments.

Local zoning practices separate rather than connect people. One zoning district is for single-family residential, another for commercial, another for multifamily. To get a loaf of bread, people have to get in their cars and drive to a store. To find recreation, they have to drive to a park. And residential neighborhoods often lack public places to meet. Allowing a mix of residential and commercial uses, buildings close to sidewalks, or an absence of bulk coverage requirements are but a few examples of how zoning ordinances could change to encourage more flexible and pedestrian-oriented design. Large-lot residential zoning in the fringe countryside separates neighbors from each other, uses up more land than necessary, and defeats the goal of fostering compact, mixed-use development.

But what you zone for is what you get. Americans have been willing to live and work in sprawled-out housing and commercial developments. There has been a long debate as to whether developers mold buyers' tastes and preferences or respond to the demands of housing and commercial-space consumers. In fairness, developers continue to build tract subdivisions and commercial strips because that is what the auto-inspired zoning regulations ask for, what banks will lend for, and what turns a profit. Alternative, more attractive, and better functioning places to live and work, as described in chapter 5, need a wider audience among developers, consumers, business operators, and local planners and elected officials.

### Fiscal Zoning: Wedding Taxation to Local Zoning

Local governments depend on property taxes to pay for schools and most other public services. This puts pressure on local governments to compete for development that will broaden the tax base. As a result, local governments join their tax needs with short-sighted land-use planning to become prime contributors to sprawl in the fringe.

Fiscal zoning occurs when local governments zone land to encourage developments that will generate more in property taxes than they demand in services. The competition among communities and counties for stores, offices, gas stations, restaurants, factories, and high-value residential property tax "ratables" drives much of the struggle over land in the fringe. Property taxes commonly are lower on county or township land outside of incorporated cities and towns, because there are fewer public services to pay for. This is especially true if new commercial and residential development can use private on-site septic and water systems, which holds down the need to develop expensive public sewer and water systems and keeps property taxes low. Finally, land costs are lower and the appreciation potential of real estate is often greater than in core cities and older suburbs. Thus, both businesses and households have strong incentives to locate in the metro-fringe countryside. Commercial and residential developments outside of existing settlements add to sprawl, sap economic and social vitality from cities and towns, and defeat efforts to create compact communities.

Education is the largest single item in the cost of local government, despite the fact that the local government often has no control over the budget of the school district. Nonetheless, politicians know that the most effective way to keep voters happy is to keep property taxes under control.

Take, for example, a forty-acre tract of open land at the edge of a town. If the local government zones the land for two-acre lots and \$250,000 houses are built on them, those twenty homes probably will generate sufficient property taxes to pay for the public services they require.<sup>7</sup> But if the local government zones those forty acres for quarter-acre lots, 160 homes could be built and the average value of those homes might be in, say, the \$125,000 range. If we assume an average of two children per house, that's over three hundred children to educate, not to mention new streets and public sewer and water facilities.

Thus, just as housing consumers have a financial incentive to buy as much house as possible (including the large lot) to take advantage of the federal mortgage interest deduction, the local government has a financial incentive to zone land for low-density sprawl to minimize public service costs. One of the ironies is that farmland and open space tend to generate more in property taxes than they demand in services. So as the local government allows single-family homes to consume more farmland and open space, a public financial gain is wasted.

In some places, notably Wisconsin, it is not uncommon for the local government to approve the subdivision of lots and then not tax them at development value until they are sold for building lots. This practice both subsidizes the holding costs of the subdivider and encourages landowners to keep lots available for development. In fairness, a

legally subdivided three-acre lot should be taxed as a residential building site, not as open space or agricultural land.

Fiscal zoning can have other negative impacts on the community:

- Single-family residential zones do not allow apartments (called "multifamily housing"), which could house more people in a much smaller area.
- Highway frontage is zoned for commercial strips and developed. In these "combat zones," approvals are readily granted, usually with little traffic planning, site design, or landscaping.
- Industrial development may not prove a net gain in local finances. Often, property tax breaks are needed to induce factories to locate in the community.
- An increase in commercial, residential, and industrial development means more jobs and attracts more people to live in the community, driving up land prices and property taxes. The vicious circle of searching for property tax revenue and continued land development and population growth suggests a dog chasing its tail.
- The favored 25 percent of the suburbs, identified by Myron Orfield as the new and growing suburbs, capture not only most of the new property tax revenues but also most of the state and federal infrastructure grants.<sup>8</sup> In short, the wealthier suburbs are being subsidized. A state program of infrastructure grants could easily include a "means testing" of communities so that wealthier communities would be required to make a larger local contribution for infrastructure projects than poorer communities.

Until there is a way to pay for public services and education from a regional source and have it based more on income than real estate, the competition for development among communites and counties threatens to defeat rational land-use planning. (For a discussion of regional tax sharing, see the discussion of the Twin Cities in chapter 9 under "Regional Government and Planning Efforts.")

In 1997, the Vermont Supreme Court declared it illegal for cities and towns to use the local property tax to fund education. Because education costs normally have made up two-thirds or more of these local governments' budgets, the search for greater property tax revenues has created a bias for growth, especially short-term strip development that may not be sustainable. The Vermont legislature responded to the court's decision by passing Act 60 to provide statelevel funding of education. The act also includes a provision that allows a municipality to offer long-term school tax breaks to lure prospective businesses only with the approval of the legislature.

While the impact of Act 60 will take years to unfold, John Ewing, former chairman of the Vermont Environmental Board, predicts that "towns will plan for their growth on the basis of more rational factors than chasing tax dollars. They will no longer have to promote development at any cost to ensure a tax base."<sup>9</sup>

Nonetheless, better land-use planning will come about only if taxpayers and elected officials can be shown that it will save money compared to separatist and fiscal zoning. One way to do this is a cost-ofcommunity-services study. Recent studies have shown that residential development, on average, is a net drain on local government budgets, costing between \$1.15 to \$1.50 in services for each dollar paid in taxes. Commercial and industrial properties produce a surplus by using only 35 to 65 cents in services for every dollar of local taxes paid. Similarly, farmland and open space require 30 to 50 cents in services for every dollar of tax.<sup>10</sup> The residential ratio of taxes paid to services demanded will change the higher the value of residential real estate. For example, five-acre minimum lot size agricultural or residential zoning without sewers will usually result in a surplus of tax revenues over services required. But this zoning will do little to protect agricultural land. It is fiscal zoning aimed at excluding multifam-

## **Box 7.2 Measurable Indicators of Sprawl That Portend Impacts on Public Finances**

- Increase in the number of commercial and residential subdivisions approved
- Increase in the total number of lots approved
- · Increase in the acreage approved for development
- Increase in building permits
- Increased number of on-site septic systems
- Increased traffic counts
- Increase in population
- Rising per capita property taxes
- Loss of acres of agricultural land

ily housing. Some communities have even calculated the "break even" home value for their community. Typically, this home value is quite a bit higher than the average existing home value in the community.

Another way to measure the fiscal impacts of growth is to compare the community's population growth rate with the change in per capita local government spending. For communities growing at 1 to 2 percent a year, per capita costs usually do not increase much. But in communities with annual population increases above 3 percent, per capita spending rises rapidly. Part of the reason is that new capacity must be built. This can be dramatic, as in the case of having to spend tens of millions of dollars to build a new high school.

#### Subsidizing Mobility

It seems that no one pays the true cost of mobility. Public transit relies in part on direct public subsidies in order to keep moving. Although gas taxes go for road construction and repair, car drivers are the beneficiaries of lavish government subsidies. Trucks generate freight taxes as well, but trucks do the most damage to roads.

State departments of transportation (DOTs) are the states' equivalent of the Defense Department on the national level. About 20 percent of state budgets go to the car.<sup>11</sup> As with any large bureaucracy, the power of a state DOT depends on its ability to expand its staff and clout and to deliver projects to the districts of many elected representatives. Highway projects, like the defense industry, mean jobs. And jobs help politicians get reelected.

Roads are powerful growth inducers in the fringe. A commuter railroad usually has no more than a dozen stations along its route. A bus line faces a limited and concentrated ridership. Roads provide access to a broad area, and, as any realtor knows, access is value.

In the metro fringe, mass transit is generally not feasible because of the scattered development patterns. Instead, fringe dwellers contribute to the statistic that more than eight out of ten Americans drive to and from work. As more people move out to fringe areas, older country roads become clogged with traffic. Also, safe driving at high speeds becomes a serious issue. The solution most often touted is to spend millions of dollars on building and widening roads. New highway construction emphasizes bypasses and ring roads around cities and towns, and widening roads from two to four lanes. But as more roads are built and improved, the more they are used to add to the dispersed housing and commercial developments they were first attempting to service.

The cost of building major new roads can be staggering. For instance, the cost of Atlanta's proposed 211-mile outer-perimeter interstate has been estimated at \$5 *billion*.<sup>12</sup> This outer beltway would circle the core city at a distance of thirty-five miles, pushing suburban development and the rural-urban fringe farther out into the country-side. Houston and Washington, D.C., are also considering the construction of such second-tier ring roads.

Ultimately, highway funds are limited. Suburban and fringe road projects divert highway funds from urban and rural projects. From the state perspective, maintenance of the interstate system has a major priority. But, in the meantime, many secondary roads and thousands of bridges are not receiving needed attention.

While speaking out against major new road projects, Vermont Transportation Secretary Glenn Gershaneck warned, "The idea that we can build our way out of severe congestion flies in the face of available land, money, people, or will."<sup>13</sup>

The choice then appears to be between greater traffic congestion and raising the cost of driving to more accurately reflect the air pollution, road maintenance, and construction costs imposed on society. But over time, new and rehabilitated development might reduce people's dependence on the car.

In 1994, the City of Portland, Oregon, released a groundbreaking study entitled "Land Use, Transportation, Air Quality Connection" (LUTRAQ). The study showed that building more highways around Portland would lead to more auto-dependent sprawl and increased air pollution. This conclusion helped to stop a proposal for a major highway along the west side of Portland. As an alternative, the study proposed the compact transit-oriented developments described in chapter 5.

#### Annexation

Annexation occurs when one local government expands its territory by taking land from another local government. Typically, a city will annex land from a county or township. A city generally cannot annex land from another city. The land to be annexed must usually be contiguous to the annexing city. Forty-four states allow annexations. Hawaii and the New England states, except Massachusetts, do not. Although annexation laws vary from state to state, in twelve states property owners outside the city must start the annexation process. Annexation may or may not require the approval of a majority of the residents who are to be annexed.

According to David Rusk, "During the 1980s, 398 central cities added a total of 2,625 square miles through annexation."<sup>14</sup> Most annexations occurred in the Sun Belt, with the South the leader and the West not far behind. The Midwest had some, while the Northeast

had almost no annexations. Early in the twentieth century, several Boston suburbs refused to become part of the city of Boston and so started a trend of stopping the expansion of East Coast cities. Since World War II, annexation has rarely occurred in the Northeast. Boston, for instance, covers a mere 3 percent of its metro region, and its percentage of the metropolitan population has steadily declined.

Descriptions of battles over the annexation of county land by cities could fill several books. On the positive side, annexation can help a city control how quickly and where growth occurs. Ted McCormack, an official with Virginia's Commission on Local Government, explains, "Towns are looking at annexations because they're seeing development coming, and they want to have some say in it."<sup>15</sup> Local governments may have a stronger bargaining position with developers over contributions for necessary public services. By annexing, a city or town can avoid the duplication of public services and the fragmenting of services between municipality and county. Also, annexation can help to keep development next to existing cities and towns and minimize sprawl throughout the countryside.

Annexation can also reduce the creation of elite suburbs whose residents work in the nearby core city but contribute little or nothing in city taxes. In essence, the city becomes a regional government, a regional economy, and a regional society. This is the argument former Albuquerque Mayor David Rusk makes in his book, *Cities Without Suburbs* (see the Albuquerque case study in chapter 11). Rusk contends that "the greater the fragmentation of governments, the greater the fragmentation of society by race and economic class."<sup>16</sup>

On the negative side, annexation, like fiscal zoning, is a way that one jurisdiction competes with another over economic growth and tax base. In the rush for economic growth, a city might annex a large amount of open land and allow it to be developed in a sprawling pattern, without an infrastructure and development plan for the area. Commissioner Ruth Bracket of San Luis Obispo County, California, keeps an eye out for excessive annexations: "What we look for is to prevent long fingers of development that encourage wasteful low-density infill. We require that the urban area remain compact and have the ability to provide all foreseeable services."<sup>17</sup>

Annexation can lead to bad feelings on the part of those who are annexed. For example, in 1997, the city of Hiawatha, Iowa, annexed 4,500 acres (or seven square miles) of Linn County, Iowa, into its city limits. This was an "involuntary" annexation, meaning that the people who lived in that part of Linn County were not necessarily in favor of becoming residents of Hiawatha.

If Linn County and Hiawatha had made an agreement about how, where, and how fast the city would grow, a nasty fight and bad feel-

ings could have been avoided. Hiawatha did not have an immediate need for such a large additional acreage. And now the threat of future annexations has struck fear into the landowners within a mile or two of the new city limits. For one thing, city taxes are higher; for another, much of the open land swallowed by the city will probably be developed over time.

The Township Board of Trustees in Bath, Ohio, summed up the danger of annexation run rampant:

Perhaps the worst effect of annexation is what it does to carefully prepared zoning goals and careful land use development that results from good land use planning. Today, annexation is used extensively to subvert zoning. Lands planned to remain in agricultural or in forested open space preserves become part of urban sprawl by a mere signature on an annexation petition.<sup>18</sup>

But annexation alone may not guarantee success in controlling sprawl. David Rusk noted that "Kansas City, Kansas, and Kansas City, Missouri, annexed more [increasing their land area by over 300 percent] and got less from it than any other region of the country."<sup>19</sup> And annexation laws can change. By a mysterious quirk, legislation passed in Tennessee in 1997 put a stop to all annexations.

## **Public Infrastructure and Service Costs**

It is no accident that the costs of local government are rising along with the increase of sprawl. A 1989 review of development patterns reported that taxpayers made subsidies of \$35,000 to \$48,000 per dwelling unit in a sprawl pattern, compared with less than \$18,000 per dwelling in a more compact pattern.<sup>20</sup> The lack of coordination of infrastructure between communities means that economies of scale may be lost, and hence the infrastructure may be more expensive than necessary. For example, in the early 1990s, a developer proposed to build a six-hundred-unit retirement home in Earl Township, Lancaster County, Pennsylvania, just outside of the borough of New Holland. The logical source of sewer service was from the borough, but the borough refused. The developer then worked with the township for the construction of a new sewage treatment plant. The new plant was built within a mile of the borough's plant, and new sewer lines had to be laid over two miles to reach the retirement home.

Population growth often produces "threshold effects" for the provision of public services. That is, above a certain number of residents, new schools, sewer and water, police, and fire personnel are needed, often at a much greater cost. For example, Gordon County, Georgia, lies in a growth corridor between the metro areas of Chattanooga, forty-five miles to the north, and Atlanta, sixty miles to the south. In the early 1990s, Calhoun, the county seat, spent \$5 million to expand its sewage treatment plant. Five years later, because of population growth, Calhoun needs to expand its plant again at a cost of \$10 million.<sup>21</sup>

Some communities have been careless in the expansion and uncentered location of infrastructure. Siting consolidated public schools in the countryside rather than in a town is a prime example. Placing government offices out along highways is another. In many cases, no lines have been drawn between where the infrastructure (especially public sewer and water) will end and the areas that will remain unserviced. This lack of predictability gives rise to land speculation as speculators buy up land in anticipation of where infrastructure expansions will occur. Some speculators will guess correctly, and some will not. Or speculators and other landowners will lobby politicians for service extensions to their properties.

Most towns of below ten thousand inhabitants do not draft a formal five-year capital improvements program showing the proposed expansion, upgrading, maintenance, and financing of infrastructure projects. Also, sewer and water authorities may not coordinate their expansion plans with local towns and counties. This lack of infrastructure planning has often put communities in the position of playing catch-up to provide adequate public facilities. An adequate public facilities ordinance can require developers to wait until the community can provide the necessary infrastructure to make the developments safe, accessible, and in compliance with health standards.

It is becoming increasingly common for communities to ask developers to help pay for the new or expanded services that will be necessary to support new development. For decades after World War II, developers were able to build their subdivisions and commercial projects and pretty much leave the tab for schools, roads, and sewer and water facilities to the taxpayers. Impact fees, mandatory dedication of open space, and road upgrades are some of the ways that many communities are requiring developers to share the burden for services. In 1995, Prince Georges County, Maryland, even passed an ordinance that requires developers of new housing to demonstrate that the anticipated number of students from a subdivision will not push the area's schools above their capacity.<sup>22</sup> Developers must pay \$5,000 for each student expected to exceed the capacity.

In the long run, the best way for a community to manage public service costs is to promote compact, mixed-use development. This landuse pattern avoids unnecessary extensions of sewer and water lines and premature hiring of additional police and fire personnel. In short, compact development is cheaper to service. It also tends to rely on already existing infrastructure and supports existing businesses. Writing about downtown Burlington, Vermont, and the construction of suburban shopping malls, journalist Sam Hemingway lamented: "For 20 years, the writing has been on the wall: If you build too much retail space too far from the region's center, you undermine the public infrastructure in place and the future vitality of a downtown on which everything depends."<sup>23</sup>

Because it is illegal to place population limits on a community, there may be no way to restrict growth other than through zoning ordinances that require large lot sizes for new houses or temporary sewer or building moratoria. But such practices are increasingly likely to be viewed as "exclusionary" by the courts and hence overturned. In fact, in the planning profession today it is often said that communities must accept their "regional fair share" of new residential development.

## The Loss of Open Space and Development Conflicts with Farmers

Open space—farm fields, rolling hills, forests, and scenic vistas—is an important amenity and economic asset for metro-fringe communities. Yet many fringe communities are witnessing significant losses of open space. For instance, rapidly growing Greater Atlanta loses an estimated five hundred acres of open space to development each week.<sup>24</sup> The disappearing open space makes more distant and rural parts of metro areas that are much more attractive to households. This out-migration to the countryside simply produces more dispersed, auto-dependent settlement patterns. And as more people move to the fringe countryside, they come into contact with long-standing commercial farming, ranching, and forestry operations.

Local and county governments in the fringe have generally done a poor job of alerting prospective newcomers to the discomforts and dangers of living in the countryside. A few places have placed nuisance disclaimers in their zoning ordinances to warn about inconveniences that might occur when living near farm and ranch operations. As mentioned earlier, Larimer County, Colorado, has produced a wonderful common sense document called "The Code of the West," which spells out the potential hardships and hidden costs of living in the countryside (see appendix 1).

While living in the countryside can be financially and emotionally rewarding, newcomers often do not think about basic services such as water, roads, and trash removal before purchasing their homes or

building lots. Nor do they anticipate the development of neighboring properties, which can change the appearance and their enjoyment of the area.

The look-before-you-leap warning is often most appropriate when newcomers settle near farm and ranch operations in the rural-urban fringe. A farm or ranch is first and foremost a business, part of a local and regional agricultural industry. The conversion of farmland to a residential, commercial, or industrial site can have a sharply negative impact on the local farm economy. As the number of farms and farm acres dwindle, farm support businesses—the feed mills, machinery dealers, processing, and transportation companies—also fade. This puts heightened cost pressure on the remaining farmers, who must travel farther for supplies and services.

Nonfarmers in the fringe often perceive farmland and ranch land as valuable only for its scenic views and open space amenities. In fact, many farmland protection efforts in fringe areas are aimed at preserving open space rather than maintaining agriculture as an economically viable industry. This strategy misses the simple point that there can be no farms without farmers. The need for integrated farmland and agricultural policies is especially evident in the fringe because land-use restrictions alone do not guarantee the financial success of a farm, and the value of farmland is usually much higher for home sites, a mall, or an office park.

As more people move to the fringe, they bid up the price of land, isolate tracts of farmland through leapfrog development, and hasten the decline of local farming. Farmers and ranchers in fringe areas have been discouraged by vandalism to crops, livestock, and machinery. But nuisance ordinances enacted by local governments to restrict farming practices, such as hauling manure or operating machinery late at night or early in the morning, have especially frustrated farmers and ranchers. Newcomers to the fringe like to settle near farms but often do not want to tolerate the noise, dust, odors, chemical sprays, and slow-moving machinery associated with farming activities. These conflicts between farmers and newcomers have given rise to "right-to-farm" laws, which nearly every state uses to protect farmers from nuisance suits if they employ standard farming practices that do not violate state and federal laws. Right-to-farm laws vary from state to state. For example, some states do not protect a farmer from nuisance suits if the farmer significantly changes the farm operation, such as from a dairy farm to a hog farm.

Right-to-farm laws do not have much of a track record in the courts. But this is likely to change as more people move to the fringe, and as newcomers file suits based on trespass rather than nuisance doctrine. That is, a plaintiff may claim that noise, dust, and odors are

leaving the farm and entering his or her nonfarm property and reducing enjoyment of that property.

Even with the existence of a right-to-farm law, a plaintiff may choose to file a nuisance suit against a farmer. Although the plaintiff has little chance of winning, the cost and aggravation to the farmer can be daunting as well as harmful to the farm operation. Michigan's right-to-farm law requires the plaintiff to pay the farmer's legal fees in an unsuccessful nuisance suit.

When farmers and ranchers see land in their vicinity being subdivided into house lots and commercial outlets, they tend to reduce the level of reinvestment in their farms and ranches, as they begin to anticipate selling their land for development in the near future. This process, known as the impermanence syndrome, describes how farmers and ranchers lose their commitment to agriculture in the face of persistent development pressures.

Every state offers preferential property tax assessment of farmland. This is intended to keep the burden of property taxes from driving farmers out of business. The preferential assessment is based on the use-value of the farmland rather than the land's highest and best use for development. But preferential assessment does not affect the property tax rate. As new development brings demands for new public services, especially schools, property tax rates can rise and drive up farm property tax bills.

Some states, mainly in the South, do not impose a penalty to recapture lost property taxes if the farmland is converted to a nonfarm use. This sets up a situation in which developers and speculators can buy farmland, receive preferential farm taxation, and then sell the land for development. In this way, preferential taxation can actually subsidize sprawl.

Weak agricultural zoning has also encouraged sprawl. Agricultural zoning is supposed to separate conflicting farm and nonfarm land uses and prevent the fragmentation of the farmland base. Many fringe communities and counties, however, view agricultural zoning as a means of protecting open space, rather than a means of helping maintain a viable agricultural industry in the local economy. This is especially true where minimum lot sizes are under twenty acres. It is not uncommon to find agricultural zones with two-acre, five-acre, or tenacre minimum lot sizes that lead to the proliferation of nonfarm "estates" and hobby farms. These rural residences compete with commercial farmers over the land base. Only where minimum lot sizes are large enough to discourage intrusions by low-density residential development can commercial agriculture be protected from the parcellation of the land base and land prices that far exceed the agricultural value. Five- and ten-acre lot sizes also may result in more land being taken up by residences than necessary. A better means of conserving farmland is area-based allocation zoning that would allow a maximum two-acre house lot for every twenty-five acres of the farm. This would discourage the creation of large-lot hobby farms (see also the section on agricultural zoning in chapter 10).

## Lack of Concern for Environmental Quality

Environmental quality is one of the main advantages that fringe areas have over cities and suburbs. Air and water quality are usually fairly good, and scenic vistas and the presence of wildlife are important attractions. But population growth and buildings bring stress on the natural environment. Local and state governments must recognize that the environmental assets of the fringe have significant value in economic development. Although environmental regulations bring additional costs of compliance, governments, the private sector, and the general public should see the safeguarding of environmental quality as a long-term investment in the quality of life. Quite simply, people want to live and work in pleasant, healthy surroundings.

### Metropolitan Air Quality

Federal air quality standards are starting to impinge upon heavily auto-dependent metro areas that have tried to ignore their deteriorating air quality. One such place is Greater Atlanta. Business leaders are worried that economic growth will be stifled if the federal government withholds highway funds from metro Atlanta because it fails to meet the air quality standards of the Clean Air Act (see chapter 6). Said Sam A. Williams, president of the Atlanta Chamber of Commerce, "The number one threat to economic development is air quality."25 He added that companies looking to locate in metro Atlanta will be forced to go elsewhere because they won't be able to obtain the needed environmental permits. Wayne Hill, chairman of the Gwinnett County Commissioners, warned that air quality standards could encourage more sprawl by causing companies to move to a more rural county at the metro fringe. With nearly half a million people in 1996, Gwinnett County is located about eighteen miles northeast of downtown Atlanta. Half of the county's workers commute to jobs in other counties or in Atlanta. According to Gregg T. Logan of the real estate consulting firm of Robert Charles Lesser, Inc., the average commuter driving time for Gwinnett County workers was thirty-four minutes in 1996, and he predicted that by the year 2020, it will increase to eighty minutes.<sup>26</sup> The longer time in traffic translates into more air pollution.

## Water Quality and Quantity

State governments have contributed billions of dollars to help local governments build wastewater treatment systems. These systems have serviced existing communities and facilitated sprawl where sewer lines have been extended.

On-site septic systems have been an essential, and often abused, technology in enabling the growth and development of the metro fringe. Because much of the new development in the fringe has been outside of established settlements, many new houses in the fringe have been built with on-site septic systems and wells for drinking water. For homeowners, the feeling of not facing monthly or quarterly sewer and water bills is liberating. Yet several problems may develop, as outlined in the following paragraphs:

- Some homes are built fairly close together on lots of less than one acre. These lots are usually too small to absorb sewage effluent and keep it from entering the groundwater. Wells become polluted and a health crisis looms. In many cases, sewer and/or water lines must be extended from the nearest city or village. These sewer and water lines spur additional development in the countryside. A rule of thumb is that a single-family residence with an on-site septic system needs about two acres. This provides enough space for a backup leach field over the life of the house and is more likely to protect wells from pollution. Another rule of thumb is to require a test of the groundwater before a subdivision is approved or a building permit issued.
- Attempts to develop poor percolating soils or areas with poorquality groundwater should be quashed. Lots above a certain size should not be exempt from percolation tests or required septic system technology. For many years, the state of Vermont allowed owners of lots of greater than ten acres to be exempt from such tests and rules; these exemptions created an incentive for buyers of building lots to purchase ten- to twenty-acre plots, which resulted in the needless loss of farm and forestlands.<sup>27</sup> Another insidious example—from Pennsylvania—is the "plume easement," which allows the area beneath neighboring land to be designated for receiving leachate from someone else's septic system.
- Some residents do not take proper care of their septic systems. A county or municipal ordinance that requires regular maintenance of septic systems is good health policy and can help the

community avoid the expensive and growth-inducing extension of sewer and water lines into the countryside. In the metropolitan area of the Twin Cities, the Met Council has estimated that 90 percent of the lakes have water quality problems from onsite septic systems that do not meet minimum treatment standards.<sup>28</sup> For an example of an on-lot septic system ordinance, see appendix 2.

- As population increases, public water supplies come under increased demand and the construction of new buildings may impinge on public groundwater supplies. Similarly, a need for new groundwater sources may occur. To protect groundwater supples, communities are turning to wellhead protection ordinances. New York City has embarked on an ambitious cooperative effort with upstate communities and landowners to protect the city's drinking water supply (see chapter 10).
- Stormwater runoff can cause soil erosion; damage to neighboring properties; siltation in rivers, lakes, and streams; and pollution from impervious surfaces such as roads and parking lots. A stormwater management ordinance can ensure that new development is properly sited to minimize runoff and employs retention basins and grass and woodland buffer strips to slow runoff and increase groundwater recharge.
- State and local governments need to be aware of the link between land uses and water quality. They may need to adopt and implement water quality standards that anticipate the impact of development. In some fringe areas, especially in the West, protecting water quantity is an important economic as well as environmental issue. A reliable water supply along with water rights can sometimes mean the difference between wasteland and developable land. The depletion of groundwater can reduce the livability of a property or a community. Also, a shortage of water can mean insufficient fire protection, a concern especially in forested areas.

"We're hitting some limits [to growth] right now [in Greater Atlanta], because we're making decisions about how much water can be taken out of the Chattahoochee," remarked Alan Hallum of the Georgia Environmental Protection Division. "We need to start thinking more seriously about conserving and re-using water."<sup>29</sup>

Competition over water supplies will intensify in the future. Agriculture is the leading user of water, but as more people move to the fringe, they compete for groundwater and push to develop public groundwater and surface water supplies on or near farmland. Water planning, like land-use planning, is an essential component of a truly comprehensive plan. Too often, water issues have been left up to individual landowners, utilities, or even the federal government. Water must be recognized as a vital resource for sustainable community and regional growth and development.

State and local governments should ensure that adequate, longterm water supplies are available—from either private or public sources—before new developments are approved. In addition, state grants, such as in Maryland, can be helpful to develop and protect public drinking water supplies.

#### Wildlife

State and local governments need to do a better job of planning for and protecting entire ecosystems, not just bits of open space or woods. Developers and local and state governments need to work together to incorporate blocks and buffers of natural areas into communities and then link them through wildlife corridors. The Habitat Conservation Plans discussed in chapter 6 seem to provide a workable model.

## **Coordination of State Agencies and Local Governments**

Several state agencies have programs and policies that directly affect local land use. The departments of transportation, commerce, housing and community affairs, natural resources, and agriculture have important yet sometimes conflicting interests. For example, the department of agriculture may be charged with protecting agricultural land, while the department of transportation is proposing to build a bypass through fringe farmland. To resolve such conflicts, governors in Pennsylvania and Vermont have issued executive orders requiring their departments of agriculture to review all state agency projects that would involve the conversion of prime and important farmlands. This sort of review can improve the design of projects by minimizing impacts, suggesting alternatives, and avoiding costly mistakes.

State agencies have a long history of not coordinating their plans with local governments. This is especially important when the state is proposing a development with a region-wide impact, such as the construction of a major new road or the purchase of several hundred acres of parkland. The state of Vermont in its Act 200 of 1988 addressed this problem by requiring that "state agencies that have programs or take actions affecting land use . . . engage in a continuing planning process to assure those programs are consistent with [state] goals . . . and compatible with regional and approved municipal plans."<sup>30</sup> Although municipal and regional plans have proceeded

halfheartedly, seventeen state agencies have adopted plans. In Oregon, the Department of Land Conservation and Development, which oversees the state land-use program, also has reviewed the plans of other state agencies for consistency with statewide goals and local plans.

If taxpayers are to receive more efficient and better-targeted state investments in infrastructure and the protection of natural resources, state agencies will have to improve their cooperation with local governments. The state agencies may be able to bring a regional perspective to economic development and environmental quality that individual local governments lack. A local government's authority stops at its borders (or a couple of miles beyond in the case of extraterritorial jurisdiction). Watersheds, for example, usually extend across the boundaries of several local governments. In 1991, the state of New York created the Hudson River Valley Greenway Communities Council to promote cooperative, regional, economic and environmental planning in a ten-county area from Yonkers to Albany.

## Political Will to Tame Sprawl

It is easy to complain about a land-use system that nurtures sprawl. But sprawl occurs as part of an ill-informed and not always scrupulous political and planning system. In many cases, sprawl happens because of a lack of political will on the part of local elected officials to oppose it.

Commenting on post-Olympic metro Atlanta, Olympic organizer A. D. Frazier said, "But now I don't see a unifying vision, nor do I see any incentive for anyone to create one."<sup>31</sup> Meanwhile, metro Atlanta's air quality, transportation, racial segregation, and sprawl problems continue.

To many politicians, growth means prosperity, and prosperity means reelection. Not a few local politicians also have real estate holdings or business interests that would profit from more people moving into the community. Such conflicts of interest are not often recognized by the voting public. Finally, few politicians like to take risks and support innovative growth management programs, especially if they cost money.

Yet it is the voters who elect the politicians. If a large, vocal, and voting growth management constituency can be formed, politicians will have to deliver growth management programs or else face defeat. Unfortunately, in most places, growth management is not a well-articulated issue. Voters are more concerned about taxes and want to see immediate results, and politicians have been slow to explain that growth management can keep a better grip on property taxes than continued sprawl. In most states, growth management rarely plays into political races for statewide offices. Proponents of growth management need to recognize that they have to become involved in the political process, however repugnant the thought. Grassroots activism and organizing interest groups can translate into positive change. Lobbying may seem a dirty practice to some, but a letter, phone call, e-mail, or fax to elected officials can attract attention and generate momentum for growth management. The keys are to have a thick skin and not give up. Compromises may have to be made, as is common in politics. But concerned, dedicated citizens can be the source of political will.

### Summary

State and local governments have done much to encourage sprawl and the growth of the rural-urban fringe. Pro-growth strategies have consciously or unconsciously held sway. New and improved road networks have helped to open up formerly hard-to-reach places and have brought them into the metropolitan sphere of influence. The pursuit of expanding the local property tax base has led to fiscal zoning and overzoning for large residential lots and commercial and industrial space.

Perhaps even more detrimental to managing growth are those counties and communities that think they are achieving balanced growth but in reality are using weak land-use planning techniques. The development densities allowed on farmland encourage the creation of rural estates that consume more land than necessary, not the retention of productive farms.

Water quality and water quantity issues are becoming more acute. Better regulation of on-site septic systems and wells is a clear need. The joining of water planning and land-use planning is essential for sustainable community and regional development.

State agencies need to improve their coordination of projects so as not to work at cross-purposes. Also, state agencies need to coordinate their plans with local and regional plans to achieve more efficient provision of infrastructure and protection of natural resources and environmental quality.

Chapter 8 examines several programs and planning techniques that local and state governments can use to manage growth in the fringe more effectively.