

# WHY SMART GROWTH: A PRIMER

International City/County Management Association  
with Geoff Anderson



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### About the Smart Growth Network

The Smart Growth Network is a coalition 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 Urban and Economic Development Division, ICMA, Center for Neighborhood Technology, Congress for the New Urbanism, Joint Center for Sustainable Communities, Natural Resources Defense Council, The Northeast-Midwest Institute, State of Maryland, Surface Transportation Policy Project, Sustainable Communities Network, and Urban Land Institute.

### About the International City/County Management Association

ICMA is the professional and educational association for appointed administrators and assistant administrators serving cities, towns, villages, boroughs, townships, counties, and regional councils. ICMA serves as the organizational home of the Smart Growth Network and runs the Network's membership program. ICMA helps local governments create sustainable communities through smart growth activities and related programs. For more information on the Smart Growth Network, contact ICMA or visit the Smart Growth Website at <http://www.smartgrowth.org>.

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# CONTENTS

|  |    |  |    |
|--|----|--|----|
| Executive Summary                          | 1  | Brownfields and Greenfields            | 30 |
| Prologue                                   | 5  | The Natural Economic Infrastructure    | 30 |
| Introduction                               | 7  | Community Impacts                      | 31 |
| Part I: Asking the Right Questions         | 11 | Putting the Pieces Together            | 31 |
| Development in Semi-Rural Areas:           |    | Lessons Learned: Your Community        | 32 |
| Lancaster County, Pennsylvania             | 11 | Conclusion                             | 32 |
| Metropolitan Urban Sprawl:                 |    | Appendix A                             |    |
| Kansas City, Missouri                      | 12 | Starting Point: The Bottom Line        | 33 |
| Shaping Metropolitan Development:          |    | Fiscal: Impacts on Costs of Services   |    |
| Portland, Oregon                           | 14 | and Revenues                           | 33 |
| Part II: Outcomes of Growth                | 17 | Economic: Impacts on the Local         |    |
| Local Government Costs and Revenues        | 17 | and Regional Economies                 | 33 |
| Residential Land Use                       | 17 | Environmental Impacts                  | 34 |
| Non-Residential Land Use                   | 19 | Social Impacts                         | 34 |
| Location                                   | 19 | Long-Term Considerations               | 34 |
| Leapfrog                                   | 20 | Appendix B                             |    |
| Corridor/Nodal                             | 20 | Tools to Shape Growth Patterns         | 35 |
| Infill                                     | 20 | Alternative Growth Patterns            | 35 |
| Density                                    | 21 | Infill                                 | 35 |
| Capital Costs                              | 21 | Neotraditional Communities             | 35 |
| Operation and Maintenance                  | 21 | Tools                                  | 36 |
| Net Effects on Costs                       | 21 | Comprehensive (Regional) Plans         | 36 |
| Economic Impacts                           | 21 | Transferable Development Rights (TDRs) | 36 |
| Market Economics                           | 21 | Habitat Conservation Plans             | 36 |
| Market Structure                           | 22 | Tax Increment Financing                | 36 |
| Home Ownership                             | 22 | Variable-Use Value Assessments         | 36 |
| Utility Pricing                            | 23 | Building Codes and Ordinances          | 36 |
| Capital Costs of Water and Sewer           | 23 | Linkage Fees and Impact Assessments    | 36 |
| Automobiles                                | 24 | Urban Growth Boundaries (UGBs)         | 36 |
| Cumulative Effects of Subsidies            | 25 | Infrastructure Investments That        |    |
| Consumer Preferences                       | 25 | Shape Development                      | 37 |
| Growth as an Economic Development Strategy | 27 | Defining a Community's Vision          | 37 |
| Competition for Growth                     | 28 | Development Impact Assessment          | 37 |
| Environmental Impacts                      | 28 | Endnotes                               | 38 |
| Development Patterns and Air Quality       | 28 |  |    |
| Water Quality: Urban Runoff                | 29 |  |    |
| Water Use                                  | 29 |  |    |

## EXECUTIVE SUMMARY

In communities across the nation, there is a growing concern that current development patterns—dominated by what some call “sprawl”—are no longer in the long-term interest of our cities, existing suburbs, small towns, rural communities, or wilderness areas. Though supportive of growth, communities are questioning the economic costs of abandoning infrastructure in the city, only to rebuild it further out. They are questioning the social costs of the mismatch between new employment locations in the suburbs and the available workforce in the city. They are questioning the wisdom of abandoning “brownfields” in older communities, eating up the open space and prime agricultural lands at the suburban fringe, and polluting the air of an entire region by driving farther to get places. Spurring the smart growth movement are demographic shifts, a strong environmental ethic, increased fiscal concerns, and more nuanced views of growth. The result is both a new demand and a new opportunity for smart growth.



*Redevelopment of an old Sears site in San Diego, California.*

This opportunity should not be confused with “no growth,” or even “slow growth.” People want the jobs, tax revenues, and amenities that come with development. But they want these benefits without degrading the environment, raising local taxes, increasing traffic congestion, or busting budgets. More and more local governments are finding that current development patterns frequently fail to provide this balance.

Kansas City, Missouri, and Lancaster County, Pennsylvania, are two communities searching for this balance. Kansas City has struggled with the classic pattern of disinvestment in urban/suburban areas while investment in as-yet-unbuilt communities on the fringe continues. In the last two decades, flight from the core to the suburbs created a “golden ring” of the priciest homes encircling the city; this ring has moved ever further outward over time. In Lancaster County, the rural character is undermined by its own popularity. Traffic congestion, higher taxes, decline in public services, loss of farmland, and breakup of the area’s diverse culture threatened the county’s quality of life and future. On the other hand, Portland, Oregon, with its long-standing urban growth boundary, downtown building boom, and well-developed transit system is one of the best known and frequently cited examples of smart growth.

Smart growth recognizes connections between development and quality of life. It leverages new growth to improve the community. The features that distinguish smart growth in a community vary from place to place. In general, smart growth invests time, attention, and resources in restoring community and vitality to center cities and older suburbs. New smart growth is more town-centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial and retail uses. It also preserves open space and many other environmental amenities. But there is no “one-size-fits-all” solution. Successful communities do tend to have one thing

in common—a vision of where they want to go and of what things they value in their community—and their plans for development reflect these values.

Fostering community goals through the development process requires knowledge. Communities are often confronted with more than one project at a time, and development alternatives often have interactive or linked effects. Still, it is possible to assess each development proposal against community goals. More important is the need to assess the cumulative and synergistic effects of a number of development projects over time. A combination of research and community experience creates the framework for thinking about smart growth presented in this document. Although not a substitute for analysis of local situations, these findings are useful in framing questions about growth and in conveying the relative magnitude of development impacts.



*ronto, Canada.*

Fiscal impacts of development are an increasing concern of local governments and taxpayers. Fiscal impacts of development are dependent largely on land use, density, location, and occupants' characteristics. Local governments are finding that farmland generates more revenues than costs. Conversely, the residential development that replaces farmland generally costs more than the revenue it generates. Achieving a mix of land uses, including residential, business, and farmland, provides localities some relief. But aggressive business attraction strategies—especially when highly subsidized through tax breaks—can backfire when secondary effects are ignored. For instance, localities need to be aware that new businesses often attract more residents and, because of tax breaks for the business, may actually add to the fiscal burden. Local governments can reduce their costs by taking advantage of existing infrastructure, promoting infill, concentrating development in designated zones, and discouraging leapfrog growth outside local service areas.

Localities are sometimes wary of directing growth for fear of interfering with the free market. But in truth, the land development market is already fraught with distortions that have played a role in creating current development patterns. Impacts on availability of open space or traffic are not considered in market decisions. Government regulations and subsidies for roads, water, sewer, and other infrastructure also impact market outcomes. Some localities are reassessing current growth patterns and wielding infrastruc-

ture investments in new ways to achieve smarter outcomes.

Consumer desires have also played a major role in creating today's development but preferences may be changing. In a market survey, potential and recent home buyers were asked about their preferences for types of neighborhoods and amenities. The researchers found that many consumers are not happy with the current styles, preferring more town-like development with a community focal point and more traditional neighborhood design. Though more examples are needed, sales figures from recent projects support this view. A study of six developments in the Southeast—incorporating higher densities, central public spaces, and a mix of uses—showed 25 to 45 percent rates of return compared with 9 percent for more standard subdivisions.

Demographic shifts seem destined to support these trends. Households are getting smaller. The “typical” family—a married couple with children—constituted 40 percent of all households a generation ago; it now accounts for only 26 percent. Buyers are also getting older. Currently a full third of the home-buying market is over the age of 45. In this market, most prospective movers say they will move to smaller houses with smaller yards to reduce clean up and yard work. Mature buyers' preferences, in combination with the overall trend in the United States towards smaller households, will likely create a greater market for smaller houses and lots. The emphasis will be on convenience and accessibility.

Local economic development strategy also affects growth patterns. Many have come to equate attracting new business with improving the community's economy. Sometimes development represents a net increase in economic activity, but it may also simply shift economic activity from one area to another. The new shopping mall on the edge of town may result in the closure of shops downtown. Many smaller stores rely upon the foot traffic created by a successful group of stores. If a few close, the entire area may fail.

Many communities have refused an "either/or" attitude toward this problem. Instead they are providing incentives for locating "big-box" stores and other major retail chains downtown, increasing competition and downtown pedestrian traffic. For an economy to truly develop, local governments must also be cognizant of the nonmarket costs associated with different development patterns. For instance, will a mall on the fringe cause greater congestion and air pollution or reduce them? Will it add to or detract from the community's social fabric? Is the downtown a focal point for the community? Does it define the community in any way? These "livability" factors are increasingly important in attracting mobile, high-tech businesses.

To further investment in existing communities and create and preserve social capital at the same time, some states have turned to direct incentives for historic preservation. Others have focused more on business retention and expansion than on finding new tenants.

However, more common for neighboring jurisdictions is to compete for new business and tax base. While communities compete to further their own gains, they may be more dependent on the region than they want to admit. Ultimately, competition between jurisdictions can be a losing proposition all the way around. *Emerging Trends in Real Estate*, an industry report, agrees. The report cites one expert who says: "There's nothing worse than having neighboring suburban municipalities competing with one another for resources and tax base....The schools go downhill, middle-class neighborhoods become lower-class. It can be over quickly." The net result? Those who can afford to move farther out, fueling the trend.

Changing development patterns have environmental implications. Farmland and open space are consumed by increasingly distant and dispersed development. Air quality is worsened as people are forced to make longer trips and become more auto-dependent. More land area covered by roads and rooftops translates into more polluted runoff in local streams and lakes. And because few incentives exist for moving development back into existing communities, abandoned downtown sites remain derelict, degrading the quality of life for area residents. Some communities are countering these trends by encouraging brownfield redevelopment and more compact, mixed use, pedestrian and transit-oriented new communities.

As local public participation shows, development, and in many cases lack of development, greatly impact a community's quality of



*Historic preservation contributes housing to central cities.*

life. Urban cores such as downtown Columbus, Ohio, live with the consequences of disinvestment, population decline, and concentration of poverty. Until recently, this decline was seen as an urban problem. However, now many suburbs find Columbus' story is their story too. No longer an urban problem, this pattern of decline is recognized by many as the outcome of a tilted playing field—one that favors investment in as-yet-unbuilt communities while discouraging investment in existing ones. The social consequences for communities can be severe.

But even where suburbs are currently economically healthy, some residents believe that their community fabric is weak. A recent article in *American Enterprise*, "Are Today's Suburbs Really Family-Friendly?" argues that typical suburban development is "desirable for families not so much for what it is as for what it isn't: it is not dangerous, not dirty.... It offers more physical security than cities and greater economic security than the average small

town.” Though some places accomplish these goals, the article argues that typical suburbs do not build “a sense of community” and isolate those without cars: the elderly, the young, and the infirm.

Clearly growth and development can cut two ways. They can be used to create community in places that have no focal point. Growth can improve quality of life by adding services, creating opportunity, and enhancing access to amenities. It can also drive disinvestment, reduce competitiveness, and degrade the environment. Businesses, community and environmental leaders, developers, and local government are increasingly dissatisfied with the fiscal, economic, environmental, and community outcomes of business-as-usual development. Instead they are finding common ground around smart growth principles—ensuring that new growth improves the economy, community, and environment of existing communities, and that in building new places, we build places people want to live in for what they are, rather than for what they are not.

## PROLOGUE

*Growth and development are controversial almost everywhere. Public debates are often pitched in extreme terms of property rights versus the public good, social engineering versus the free market, and unfettered growth versus no growth. Both sides in the debate formulate their positions from truths about growth. Growth can fuel economic expansion, revitalize commercial districts, and increase the tax base. But it can also cause traffic congestion, drain local resources, and destroy local cultural and ecological features.*

*A community's growth strategy can greatly influence the outcome of growth. Ultimately, these results affect the health and welfare not only of the individual community, but also of entire regions and, indirectly, the entire nation. This primer uses research, economic analyses, and actual community experience to illustrate a new concept known as "smart growth." Smart growth adds value to existing communities while engaging all stakeholders and rewarding developers with profitable products.*

## INTRODUCTION

Smart growth shifts the terms of debate away from the pro- and anti-growth context of the past. Coalitions of developers, environmentalists, citizens, and government officials are banding together to address the new fundamental question, which is not whether to grow but how. Successful communities have a vision of where they want to go and of what things they value in their neighborhoods and downtowns. Their plans for development reflect these values and answer questions facing communities nationwide. How can a community capture the benefits of growth without overcrowding its schools? How can a community maintain its small-town charm and character while accommodating new residents and prospering economically? How can a community, city, or suburb benefit from growth but not suffer the post-growth disinvestment that so often follows?

Across the country in large metropolitan areas and rural towns alike, growth and development are receiving increased attention. Growth patterns are linked to a community's success in providing quality schools, relieving traffic congestion and air pollution, controlling taxes, and providing economic opportunity. Major regional newspapers in Kansas City, Missouri, and Charlotte, North Carolina, reported on this connection, examining "sprawl" in terms of loss of farmland and fiscal stability, as well as of disinvestment in older cities and suburbs. Rural areas are responding to the growth they see heading

their way. In rapidly growing communities from Virginia to Idaho, small towns hold local forums on growth. Anticipating rapid development, they seek to preserve their way of life.

Of course, growth has another face. It is praised for successfully leveraging existing

investment, revitalizing downtowns in Cleveland and Baltimore, and fueling economic expansion in already thriving neighborhoods in Portland, Oregon. It is responsible for the revitalization of Suisun City in California. Innovative developers are using new suburban growth to increase the sense of community and add amenities to bedroom communities. In discrete increments, such as renovation of houses and redevelopment of abandoned sites, growth keeps communities healthy and livable.

Despite successes associated with growth, communities increasingly have an ingrained, BANANA (build absolutely nothing anywhere near anything) reaction. In many such cases, the community has failed to recognize qualitative differences among growth patterns. Rather than blindly resisting growth, communities can find strength in directing growth to meet their objectives, such as affordable housing, economic development, and better transportation alternatives. The key is to ask how to use growth rather than how to stop it.

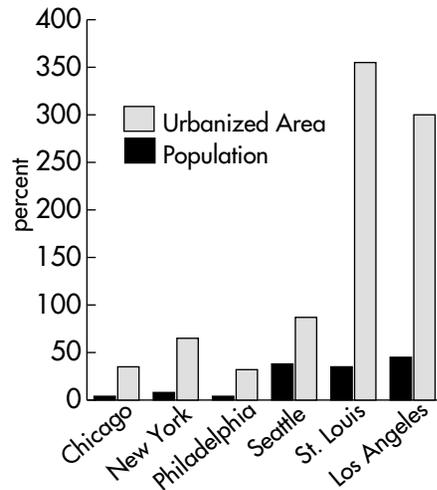
Current development patterns are all too familiar. Post-World War II growth has been characterized by disinvestment in older communities and the flight of much of the middle class to newer, diffuse, single-use developments. Cities such as Chicago and Philadelphia have grown by more than 30 percent in land but by less than 5 percent in population between 1970 and 1990.<sup>2</sup> In the 1940s and 1950s, it was commonly assumed that such growth automatically meant investment, jobs, new housing, and an improved tax base. These

### **BUILDING BOOM REVITALIZES CALIFORNIA CITY**

*In 1989, the San Francisco Chronicle ranked the city of Suisun as the worst place to live in the Bay Area. In response, the city took on a massive building effort in its own downtown, renovating some buildings, demolishing others, and clearing the waterfront for better commercial and citizen access. Today, commercial activities have returned to the downtown and the waterfront draws boaters and festival crowds.*

—USA Today<sup>1</sup>

## Land Consumption Exceeds Population Growth 1970-1990



Note: St. Louis data show 1950-1990.  
Source: Henry Diamond and Patrick Noonan, *Land Use in America*, 1996.

assumptions were challenged in the late 1970s, however, by traffic jams, crumbling infrastructure in older neighborhoods, and the spread of “urban” problems outward to the suburbs.

Older suburbs now experience the downward economic cycle once thought to be uniquely urban. Indeed, many suburbs now have more in common with their urban counterparts than with new suburbs. Myron Orfield,

state legislator from the Twin Cities, recognized this trend and has documented it to forge regional problem solving between the city and the surrounding suburbs. David Rusk, the former mayor of Albuquerque, New Mexico, is not surprised by this new alliance. “My rule of thumb is that the faster the rate of sprawl, the faster the rate of abandonment [of older cities].”<sup>3</sup> Such observations have led residents of existing communities to look more closely at the prospect of new development on the fringe that might use up scarce investment dollars. Maryland’s recently enacted smart growth legislation goes even further than regional cooperation; it commits the state to investing in existing communities rather than subsidizing flight to as-yet-unbuilt developments. Its perspective is that new growth, especially growth subsidized by the state, should add to the value of existing communities.

The call to reexamine our growth patterns and practices has support from some unlikely sources. DuPont Chemical Company recently announced its desire to see a reduction in greenfield development.<sup>4</sup> The President’s Council on Sustainable Development, a group of business CEOs, environmentalists, and government agencies, recommended new patterns of growth to maintain community vitality.<sup>5</sup> And the Bank of America warned: “Ironically, 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 our life....This is not a call for limiting growth, but a call for California to be smarter about how it grows.”<sup>6</sup> Finally, the mag-

azine *American Enterprise* recently ran a series of articles calling into question the “family friendliness” of recent development patterns.<sup>7</sup>

Reassessments of growth point to a solution based on smart growth—growth that enhances the value and character of existing business and community investments and accommodates growing regional populations. Smart growth acknowledges that new growth not only is necessary, but when done well is also critical to the health of existing neighborhoods. New collaborations between the public and private sectors are aimed at rewarding development that accomplishes this goal. Communities that successfully meet the challenge not only will improve quality of life for their citizens, but will also retain their



School bus approaches the Chicago Public Library—Where should public investment dollars go?

investment value longer. These places will be attractive sites for new investment and growth, which will improve their ability to compete in the world economy. Some places have already taken steps in this direction. Others are only beginning to see the possibilities.

The remainder of this primer explores both positive and negative aspects of growth and suggests how communities can achieve smart growth. Part I uses three case studies to illustrate why it is important to ask questions about proposed growth. Part II reviews a range of results from growth, looking separately at government, economic, environmental, and community effects. The appendices describe a number of tools and assessments that you can use to begin creating smart growth.

## PART I

### ASKING THE RIGHT QUESTIONS

Successful growth starts with the right questions. These questions identify the important decisions about growth based on both obvious and subtle impacts. For example, will the costs of our school system change as a result of new development? Will new residents expect a different level of public service than is currently provided? How much will local tax revenues increase, and who would receive the additional revenues? What happens to the tax base after a building boom is over? (See Appendix A for a set of questions to help you begin evaluating development.) A look at three typical communities illustrates their different experiences with growth and highlights some of the critical issues for communities to consider.

The following three case studies—Lancaster County, Pennsylvania; Kansas City, Missouri; and Portland, Oregon—are representative of the experiences of communities across the country. The first two case studies show the unanticipated drawbacks of rapid growth. The third case study shows that with smarter growth, new investments add value to existing communities.



*Preservation of rural character is a challenge.*

### DEVELOPMENT IN SEMI-RURAL AREAS: LANCASTER COUNTY, PENNSYLVANIA

Historically, Lancaster County had been beyond the reach of eastern urban centers. But in the 1980s, with better highway access, the area had become a magnet for urbanites who longed to live in the country and were willing to commute to places as far away as Harrisburg, Philadelphia, New York, Wilmington, Baltimore, and Washington, D.C.

The transformation from agricultural to suburban community progressed rapidly. In the ten-year period from 1981 to 1990, population grew by 50 percent, construction rates were up 300 percent, and the number of outlet stores jumped from 17 to 150. This growth in residential and commercial land use resulted in a loss of 50,000 acres of farmland and jeopardized the county's agricultural production, worth \$800 million per year. It also threatened the county's rural character, its natural beauty (a draw for prospective businesses), and its culture (the source of its \$400-million-per-year tourist trade).

The area's culture bears the imprint of the Plain Sect people, the Amish, and Old Order Mennonites, who have lived and farmed here for two and a half centuries. The changing way of life, rising land prices, and inheritance taxes made it difficult to preserve the family farm and pass it on to the next generation. With land values rising from \$6,000 to \$20,000 per acre, fewer than 1 in 10 newly married Amish couples were taking up agriculture as a way of life.



The economic and social changes resulting from growth affected non-Amish residents as well. New arrivals in the community tended to be more affluent than longer-term residents and tended to expect a higher level of services from the government. Local property tax increases were necessary both to extend existing infrastructure to new developments and to meet the new residents' higher expectations for schools and other public services. Growth exacerbated capacity problems on local roads and highways. In paving over open space and building on productive agricultural soil, new growth undermined a traditional way of life for a diverse population.

But the influx of office and industrial parks, the strip commercial developments, and the thousands of acres of new homes were a

source of economic vitality that enabled the county to weather national economic downturns. Growth supplied new economic opportunities, especially important for families that could not provide farms for all their children. Some of the long-term residents cashed in on the higher land values, sold their farms, and moved or adopted a new, nonfarm way of life.

Eventually, however, both long-term residents and newcomers began to realize that road congestion, higher taxes, declining public services, and loss of the county's diverse culture jeopardized the community's quality of life and future. The county's planning commission agreed that some of these problems could be mitigated by controlling where development occurred. As a result of this consensus, the 61 local governments in the county endorsed regional growth management.

In 1991, Lancaster County developed a growth management plan to direct future growth. The centerpiece of this plan is the use of urban growth boundaries (UGBs), which limit the construction of public infrastructure to areas where sewer, water, roads, police, fire, and schools already exist and to the lands immediately adjacent to them. Thus, the UGBs would direct the location, timing, and public cost of growth.

From the start, developing and implementing the growth management plan was a broad, cooperative, consensus-building effort. Rather than limit community participation to input and review, Lancaster County invested

considerable time, personnel, and financial resources to gain consensus on the plan. As a result, local governments, interest groups, and the general citizenry have embraced UGBs, and only five years after developing the plan, decision makers in Lancaster County have agreed on and completed drawing 80 percent of the growth boundaries. Although growth boundaries are no panacea, they nonetheless demonstrate the commitment of the communities within the region to actively shaping growth for a better future.<sup>8</sup>

### METROPOLITAN URBAN SPRAWL: KANSAS CITY, MISSOURI

Nowhere in the United States are post-World War II development patterns more evident than in Kansas City. No other metropolitan area has more space between homes. No other big American city has more miles of road per capita. With a dizzying array of counties, cities, towns, and special-purpose utility districts in two states, the Kansas City metropolitan area ranks third in the nation in terms of governmental bodies per person.

Between 1960 and 1990, the overall population in the Kansas City metropolitan area grew by less than one-third while the developed land area doubled. This trend reflects the movement of people from the core to the suburbs. Housing prices have changed accordingly. Census data shows that the most expensive homes in Kansas City form a ring around the city; this "golden ring" has been moving

farther from downtown at a rate of about two miles per decade. In its wake are acres of declining property values that have left many residents stranded.

Inside the golden ring, many parts of Kansas City have seen a decline in population and income. This dual decline has been true for both the older suburbs and the central city. Median family income in more than one-half of the Kansas City suburbs declined even faster than incomes in the city during the period from 1960 to 1990. The combination of falling populations and declining incomes has spread to the commercial sector as well. Empty stores, vacant parking lots, and boarded-up shopping centers dot the city and inner suburbs.

Jobs also have moved with the population. In 1970, nearly three out of every five Kansas City regional jobs were in the core; in 1990, only two out of five were in the core. Suburban community officials have fueled this outward movement of jobs by providing tax breaks, public infrastructure, and other incentives to large commercial and industrial employers. Central cities fight back with tax breaks of their own. In the recent battles over the relocation of Sealright, Black & Veach, Toys-R-Us, and Citicorp to outlying locations, more than 2,800 jobs were at stake. Residential taxpayers on both sides are the big losers when municipalities bid for employers with tax breaks; residents end up paying higher local property taxes to make up for corporate tax breaks. With rapid expansion in the region, more jurisdictions will enter the bidding war.

Even when a jurisdiction succeeds in winning an employer, jobs don't necessarily go to those residents who subsidize corporate tax breaks. Sixty percent of the unionized workforce at the General Motors' (GM) major plant expansion in Kansas City, Kansas, live in Missouri. Meanwhile the residents of Wyandotte County, Kansas, have paid \$1,300 each for the tax breaks given to GM to locate there. As stated in the local newspaper, "Kansas City, Kansas, landed a whopper in 1985 when it won a new General Motors Corporation assembly plant....The taxpayers have been paying for it ever since."<sup>9</sup>

Other policies have also helped to shape Kansas City's growth. Like other large cities, Kansas City used federal tax dollars to build a series of beltways over the last several decades, enabling development on the fringe and abandonment of existing infrastructure. Mortgages insured by the Federal Housing Authority subsidized home purchases in the suburbs, further enabling flight from the cen-



tral city with its declining neighborhoods, aging infrastructure, and shrinking tax base. Central cities often must spend nearly twice as much for public safety as their suburban counterparts and usually can afford roughly only half as much per capita for capital improvements. This imbalance sets in motion a cycle of disinvestment that is difficult to break. This cycle is moving out into the Kansas City suburbs, trailing the golden ring of investment.

During 1995-96, the Metropolitan Development Forum attempted to counteract these forces by bringing together business, political, and community leaders in a yearlong series of meetings intended to promote critical thinking and public understanding of issues affecting the growth and development of the Kansas City metropolitan area. According to the executive director of the Mid-America Regional Council, one of the sponsors of the Forum, "The purpose of the Forum was to inform, not to persuade. The Forum events...presented a range of viewpoints on key issues and opportunities surrounding physical growth and development in our region." The Forum is credited with contributing to progress in several areas:

- Achieving regional accord on the economic development role of tax incentives
- Examining barriers to affordable housing
- Launching "empowerment zones"
- Measuring "vital signs"—neighborhood-level indicators
- Determining transportation needs in the

perimeter and implementing a long-range transportation plan

- Developing a regional clean-air strategy
- Creating a metropolitan greenway
- Creating local planning initiatives

In addition, the Forum helped to promote greater interest in the bistate cultural tax, a special effort launched to help restore Kansas City's declining core. The \$118 million tax, designated to renovate Union Station and to create "Science City," a new science museum within the station, was put to a vote in 1995. The proposal passed, bringing together the different communities of the metropolitan area and presenting an opportunity to begin the much needed revitalization of Kansas City's downtown.<sup>10</sup>

## SHAPING METROPOLITAN DEVELOPMENT: PORTLAND, OREGON

In 1970, Portland's downtown, like many across America, was dying. The problems were familiar and not unlike Kansas City's—urban decay, congestion, environmental deterioration, and a diminishing quality of life. However, Portland took a different route and made a conscious choice to direct growth and investment. Portland's regional residents elected a regional government with broad powers to implement a regional vision. Since then, Portland has been able to channel its growth in ways that preserve a high quality of life and accommodate an increasing population. Downtown employment has grown from



*Portland, Oregon's MAX light-rail system*

50,000 jobs in 1975 to 105,000 jobs today. During the same period, air quality has improved from over 100 violations per year in the 1970s to no violations since 1987. Portland has added no additional parking spaces downtown, and over 50 percent of downtown work trips are accomplished on transit.

The key elements in Portland's success include

- Focusing the most intensive development adjacent to transit
- Requiring development at a pedestrian scale with a mix of uses
- Limiting commuter parking
- Investing heavily in transit
- Creating a UGB that defines urban and rural areas.

The centerpiece of Portland's approach is a strategy to shape regional growth by coordinating transportation investments with land-use policies. For example, Tri-Met (Portland's

transit authority) has worked with local governments to decrease automobile dependency and better coordinate land use with transportation by widening sidewalks, improving pedestrian access, allowing a mix of uses, and creating clustered development. In exchange, local governments expect Tri-Met to provide the necessary transit service to accommodate their growth.

Light rail and Portland's supporting policies have drawn a great deal of investment around the transit system. Over \$1.3 billion worth of development, exceeding 10 million square feet, is under construction or has been completed immediately adjacent to the MAX light-rail line since the decision to construct the project. Plans have been announced for another \$440 million worth of improvements. In downtown, MAX is credited with accelerating historic renovations, influencing the design of office buildings, and helping to make new retail development feasible. In addition, businesses are reporting higher sales volumes and increased foot traffic because of MAX.

Portland's efforts would not have been as successful without broad public support for the growth strategy, and transit in particular. For over seven years, MAX has enjoyed public approval at the 90 percent level. Support for building more roads, on the other hand, has diminished. No new road capacity has been added to the downtown for the past 20 years. Portland even removed a six-lane expressway to create a downtown riverfront park, and shifted money designated for two new free-

ways, investing in transit instead. In a recent survey, only 14 percent of the region's voters favored expanding the road system over more transit. In two successive measures, voters approved expanding Portland's light-rail system by nearly fourfold, from 15 to 58 miles. Clearly, residents of the Portland metropolitan area have realized that these transit and land-use decisions are not ends in themselves but are the tools with which to build a more livable community.<sup>11</sup>

The case studies demonstrate growth and development's tremendous impact on a community's economy and environment. Without planning for these impacts, attractive elements of the community—good schools, uncongested roads, sense of community—can be lost. Smart growth recognizes these connections and leverages new growth to improve the community. The features that distinguish smart growth vary from place to place. There is no one-size-fits-all solution. Successful communities do tend to have one thing in common: a vision of where they want to go and of what things they value. Their plans for development reflect these values. Part II of this primer is intended to help communities better understand how alternative development proposals will affect them and their gathering places, resources, and character.

## PART II

### OUTCOMES OF GROWTH

Making choices about development is a complex process. Communities are often confronted with more than one project at a time, and development alternatives often have interactive or linked effects. Still, it is possible to assess each development proposal against community goals. Equally important is the assessment of cumulative and synergistic effects of a number of development projects over time. This section presents research and analyses, along with communities' own experiences, to create a framework for thinking about the range of effects that growth may cause. Although not a substitute for analysis of specific local situations, this framework is useful in framing the right questions about growth and in conveying the relative magnitude of likely development impacts.

Part II is divided into sections that explore the following areas:

- Local government costs and revenues—such as cost of public services and tax revenues generated
- Economic impacts—such as changes in job availability, access to jobs, and impacts on a community's existing economic base
- Environmental impacts—such as changes in air and water quality, loss of farmland, and availability of habitat and open space



*Smaller-lot houses provide housing diversity.*

- Community impacts—such as access to services and sense of community.

### LOCAL GOVERNMENT COSTS AND REVENUES

Virtually all development requires public facilities and services, but communities often underestimate these needs. Research and experience have shown that a development's impact on local government finances is determined largely by that development's land use, density, location, and user characteristics.<sup>12</sup>

#### Residential Land Use

Few people realize that most residential development generally doesn't pay its own way. In Prince William County, Virginia, for instance, a local official says, "Every time I see a new house, I look at it and say, there goes another \$1,600."<sup>13</sup> In community after community and study after study, the results are the same. As a general rule, residential development costs more than the revenue it generates. The main drivers of this equation are number of children (and thus school costs), level of service provided, and value of the property. Number of school-age children is especially important in suburban and rural communities, where the cost of providing education comprises anywhere from 50 to 80 percent of local operating expenditures.<sup>14</sup>

The negative impact of residential development on local government budgets is not always recognized because of the timing of costs and revenues. During construction,

**ABLE 1****Ratio of Tax Revenues to Cost of Services**

for Various Types of Businesses and the Residences of their Employees, Montgomery County, Maryland

| Enterprise Activity              | Business Activity Alone | Business Plus All Employees |
|----------------------------------|-------------------------|-----------------------------|
| Large white-collar installation  | 9.81                    | 1.29                        |
| Construction                     | 7.27                    | 0.85                        |
| R&D installation                 | 6.13                    | 0.88                        |
| Hotel/motel                      | 4.13                    | 1.40                        |
| Small rental office building     | 3.95                    | 0.92                        |
| Manufacturing plant              | 3.70                    | 0.71                        |
| For-profit medical               | 2.67                    | 0.95                        |
| Major shopping center            | 2.14                    | 1.00                        |
| Federal government office        | 0.54                    | 0.71                        |
| Tax-exempt medical center        | 0.15                    | 0.59                        |
| Open space and agricultural land | 3.03 - 9.09*            |                             |

Source: Adapted from Boise-Cascade Center for Community Development, "The Relative Importance to Montgomery County of Selected Economic Activities: A Benefit/Cost Study," 1993.

\*Source: American Farmland Trust, *Is Farmland Protection a Community Investment? and How to Do a Cost of Community Service Study*, 1993.

building activity is providing very attractive tax revenues to the state and local government. In California, every million dollars of home building activity directly and indirectly generates more than \$100,000 in tax revenues for state and local governments.<sup>15</sup> At the same time, the residents do not yet occupy the houses, so there is no service demand from residents. But these are one-time revenues.

After residents move in, they demand services in excess of their property taxes. Meanwhile, the attractive revenues from construction activity are gone. In rapidly growing areas, there are often revenue surpluses being generated in building the next subdivision and these revenues can make up the difference. However, once construction moves on to the adjacent county, the one-time revenues attributable to

the construction must be made up—by raising property taxes or cutting services, and frequently both. Older suburbs like those inside Kansas City's golden ring are particularly vulnerable because they are principally residential. Once the building boom passes them by, they have no other tax base to replace it.

In an attempt to ensure that property taxes will pay for most of the services demanded, some jurisdictions have enacted restrictive zoning codes.<sup>16</sup> This zoning does not permit lots smaller than a certain size and thus effectively prohibits lower-priced housing. Although it is unrealistic to expect a jurisdiction to support itself exclusively on lower-value property, a mix of property values is likely preferable for two reasons. First, if there are no lower property values, the community will have difficulty finding people to work essential, lower-paying jobs, such as schoolteacher, nurse, or police officer. Those businesses that are able to find workers will be attracting them from distant locations, creating congestion on local roads and highways. Second, each jurisdiction that adopts this policy effectively increases the pressure on its neighboring jurisdiction to do the same. The resulting social stratification and concentration of lower-wage households is inconsistent with U.S. values of inclusiveness and equal opportunity.

However, providing housing for lower-wage households shouldn't detract from the community as many public housing projects have in the past. Public housing in Charleston,

South Carolina, is a good example of how mixed-income housing can work. The scattered buildings don't resemble traditional, monolithic, public housing. The porches, materials, and roof lines all look like other Charleston homes. Charleston mayor Joe Riley's dictum is that "there is no reason for government ever to build something that is not beautiful." By designing handsome public housing, the city of Charleston minimized the NIMBY (not in my backyard) problem.<sup>17</sup>

Mixing housing types, with large-lot homes next to smaller (less expensive) lots and apartments above commercial uses, can provide housing diversity and fiscal relief. Smaller living spaces are occupied by smaller families, singles, and retired couples. The national trend toward smaller households will make this an increasingly attractive and marketable option for local governments and developers.<sup>18</sup>

### Non-Residential Land Use

Retail, commercial, and industrial land uses, along with agricultural lands, generally provide positive net revenues to the local government and are often used to balance out the shortfall associated with residential uses.<sup>19</sup>

Nonresidential developments appear to be attractive solutions to revenue shortfalls. This is especially true for bedroom suburbs that have "built out." Having relied on the taxes provided by rapid building, they now find themselves desperate for revenue generators. As a result, communities might consider

incompatible uses that they otherwise would not accept. Revenue shortfalls also lead to bidding wars between jurisdictions, with an increasing array of tax breaks and incentives for incoming businesses. But many localities fail to account for secondary impacts of attracting nonresidential development. For instance, new commercial and industrial development frequently attracts new residential development. Rio Rancho, New Mexico, offered a \$114 million incentive package to draw Intel's new semiconductor plant in 1993. By 1994, the town found itself unable to afford schools for the children of the families that came with the plant.<sup>20</sup>

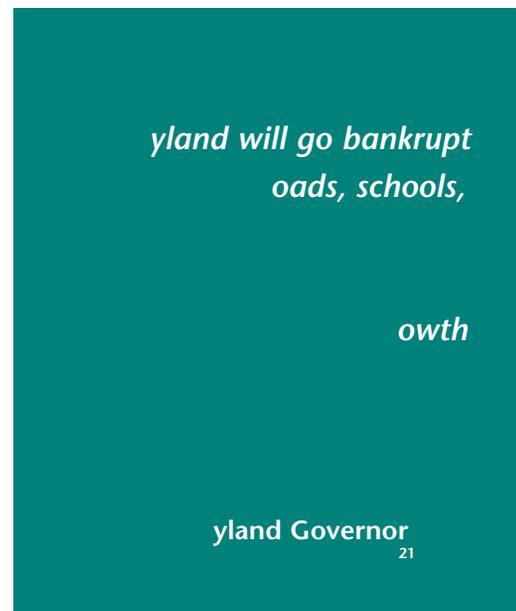
As shown in a study done for Montgomery County, Maryland (see Table 1), when the impact of employee residences is

also included, the net tax revenues of nonresidential development may be significantly reduced. For example, the ratio of tax revenues to service costs for a major shopping center is about \$2.14 for every dollar of local government service required. But when the taxes and service costs of the residences of the shopping center employees are included, the ratio drops to \$1.00 of revenue for each local government dollar spent.<sup>22</sup>

Thus, to be successful, the strategy of attracting businesses must also focus on where employees will be coming from. Are they current residents of the jurisdiction or will they be moving in from outside? Strategies focusing on providing jobs to current residents will almost certainly improve local fiscal position. If employees will be moving in, will they bring higher-than-average incomes or many school-age children? The impact on costs and revenues will also be affected, as Rio Rancho found, if the developer receives tax breaks as an incentive for building in the community. If the community does not collect enough revenues to cover the costs of providing local services, it must either recover these excess costs from other properties in the community or reduce services.

### Location

Service costs are affected both by land-use characteristics within the development and by the development's location relative to existing communities. Locations far from existing communities are often referred to as "leapfrog."



**BLE 2**

**Summary of Private Costs of Development**  
1987 Dollars per Dwelling Unit (d.u.)

| Density and Dwelling Type                   | Service Category | Neighborhood Costs |
|---|------------------|--------------------|
| Single family executive<br>(1 d.u./4 acres) | streets          | \$24,848           |
|   | utilities        | 39,951             |
| Single family<br>(1 d.u./acre)              | streets          | 12,308             |
|   | utilities        | 19,789             |
| Single family conventional<br>(3 d.u./acre) | streets          | 7,083              |
|   | utilities        | 11,388             |
| Single family clustered<br>(5 d.u./acre)    | streets          | 6,121              |
|   | utilities        | 7,574              |
| Townhouses<br>(10 d.u./acre)                | streets          | 4,855              |
|   | utilities        | 4,920              |
| Garden apartments<br>(15 d.u./acre)         | streets          | 3,367              |
|   | utilities        | 3,285              |
| High-rise apartments<br>(30 d.u./acre)      | streets          | 1,843              |
|   | utilities        | 1,997              |

Source: Adapted from James E. Frank, *The Costs of Alternative Development Patterns: A Review of the Literature*, 1989.

**Leapfrog Development**—Studies have shown that costs increase when development takes place beyond the local service area. The major source of higher costs for leapfrog developments is the

necessity of providing longer trunk lines and connecting roads. These costs tend to increase with distance. For example, for residential developments of three to five dwelling units per acre that are 10 miles away, utility costs are almost \$10,000 per unit, compared to less than \$5,000 for developments that are only 5 miles away.<sup>23</sup> Unlike density-related infrastructure costs, leapfrog cost increases are generally borne by the public.<sup>24</sup>

**Corridor/Nodal**—Two other forms of development, known as “corridor” and “nodal,” each direct new growth to designated areas either along a certain service corridor or to a specific node or area. This strategy reduces costs by concentrating growth in certain areas so that government-provided roads, sewers, and schools are needed only in these areas. In a Florida study of different forms of similar land uses and levels of service, public capital costs were between \$16,000 and \$17,000 per unit for corridor and nodal developments, and almost \$24,000 for scattered developments.<sup>25</sup>

**Infill**—Development within existing cities and towns, known as infill, can save public money by taking advantage of existing infrastructure. If the existing infrastructure has excess capacity—for instance, additional sewage treatment capacity—then infill development will actually reduce costs per household.

A study conducted in Detroit, Chicago, Milwaukee, and Cleveland showed that by developing brownfields—which represent only a subset of developable infill areas—instead of growing at the fringe, these four cities could absorb 1 to 5 years of residential growth, 10 to 20 years of industrial growth, or 200 to 400 years of office space growth.<sup>26</sup> Some infrastructure may be too deteriorated to accommodate infill.<sup>27</sup> In such cases, upgrading the infrastructure will benefit not only the new development but also the existing neighborhood, encouraging further reinvestment.

Regardless of the potential value of existing infrastructure, some communities continue to build new infrastructure, at significant cost, on the fringe of the urban area. This dynamic can be seen at work in the state of Maine. Between 1970 and 1995, the state of Maine lost 27,000 students but spent \$434 million on new schools in outlying locations. During this same period, the cost to bus children to and from school rose from \$8 million to \$54 million (a 65 percent increase in inflation-adjusted dollars).<sup>28</sup>

## Density

Local government revenues and costs are also affected by how close together developments are built—or how densely land is developed. The density of American cities has dramatically decreased over the past 20 years. Density has effects on both up-front costs and ongoing maintenance costs. Here we consider these two types of costs separately.

**Capital Costs**—The effect of density on capital costs for neighborhood infrastructure is well documented.<sup>29</sup> Increasing density generally results in capital cost savings for roads, water and sewer, and other neighborhood-scale infrastructure. Shorter runs between houses translate into infrastructure cost savings. And where houses are connected, shared walls reduce materials costs. Because the developer generally pays for the neighborhood-level infrastructure, these costs (within the development) are borne by the developer and the home buyer. Some localities effectively prevent private cost savings by prohibiting development densities over a certain threshold or by requiring certain spacing between houses that precludes clustering options. As Table 2 demonstrates, these costs are not inconsiderable.

In subdivision development, these costs are borne by the private sector. Thus, the density within a new subdivision does not have a large effect on local government capital costs. Revenues, however, are a different story. Although it might not accrue capital cost savings, a municipality or county that clusters its

development may save substantially more agricultural land than its lower-density counterpart. As mentioned, agricultural land generally provides a positive net revenue to local governments.

**Operation and Maintenance**—Operations and maintenance costs generally account for 80 to 85 percent of local government costs.<sup>30</sup> Like capital costs, operations and maintenance are also affected by development density. Much remains to be learned about exactly how costs and revenues are affected. Intuitively, we might expect servicing higher-density development to be cheaper. However, study results yield conflicting conclusions. Some evidence suggests that higher densities are associated with higher per-capita operations and maintenance costs for local governments, at least for certain services.<sup>31</sup> At very low densities, some costs, such as private wells and septic systems, may be shifted from the local government to the individual homeowners. On the other hand, costs of some services, such as school transportation costs<sup>32</sup> and water and sewer operations, can be higher for low-density developments where these services are centralized.<sup>33</sup>

Several questions still need to be answered. What is the effect of urban form on operations and maintenance? How do levels of service change? Given these uncertainties and in some cases conflicting findings, it is difficult to calculate density's ultimate impact. One thing is clear, however: today's service costs are likely to change with changing development and are therefore poor indicators of costs in the future.



*Operating and maintaining infrastructure account for a large share of local government costs.*

## Net Effects on Costs

Some studies have sought to capture the net effects of differing growth patterns (including location, density, and land uses). Their results support the individual findings discussed above. For instance, a study of two alternative growth patterns in New Jersey found that following the current dispersed pattern of growth would cost approximately 9 percent more in infrastructure capital costs than following a planned development pattern.<sup>34</sup> Other studies by Frank<sup>35</sup> and Duncan<sup>36</sup> have found similar outcomes (see Table 3).

## ECONOMIC IMPACTS

### Market Economics

It is frequently argued that current patterns of growth and development in the United States are simply the results of consumer preferences. Any attempt to affect how growth

**TABLE 3**

**Relative Infrastructure Costs of Low-Density and Concentrated Development**  
From Three Major Studies

| Infrastructure Cost Category | Trend Development | Planned Development: Three Studies |       |          | Planned Development |
|------------------------------|-------------------|------------------------------------|-------|----------|---------------------|
|                              |                   | Duncan                             | Frank | Burchell |                     |
| roads                        | 100               | 40%                                | 73%   | 76%      | 75%                 |
| schools                      | 100               | 93%                                | 99%   | 97%      | 95%                 |
| utilities                    | 100               | 60%                                | 66%   | 92%      | 85%                 |
| other                        | 100               | 102%                               | NA    | NA       | 100%                |

Sources: Robert W. Burchell and David Listokin, "Land, Infrastructure, Housing Costs and Fiscal Impacts Associated with Growth: The Literature on the Impacts of Sprawl versus Managed Growth," 1995. James Duncan and Associates, *The Search for Efficient Urban Growth Patterns: A Study of the Fiscal Impacts of Development in Florida, 1989*.

James E. Frank, *The Costs of Alternative Development Patterns: A Review of the Literature, 1989*. Robert W. Burchell et al., *Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan, Report II: Research Findings, 1992*.

occurs, the argument goes, will create inefficiency within the market. Clearly, consumer preferences and shifts in the economy have driven much of the development in the last 50 years. Suburbanization of jobs, lower land costs, and the desire for privacy and space are all factors that have driven development to the fringes of urban areas. Yet government policies provide the framework in which market activities occur. And due to earlier postwar priorities, many federal and local policies favor low-density, automobile-dependent development. These policies, many argue, need reexamination in a modern context. This section

explores features of the market that affect development.

### Market Structure

Ewing points out that land markets have few of the characteristics of an efficiently functioning market. The uncertainty of future land values leads to speculation and fragmented, or leapfrog, development. Yet benefits of open space, recreation areas, and other public goods are not fully captured in the market. Similarly, as anyone who has experienced traffic congestion generated by a new development knows,

land development creates many other costs that are not captured in the market.<sup>37</sup>

Persky and Wiewel, in a study of the distribution of costs and benefits of development, conclude that contrary to popular wisdom, suburban expansion does not reflect economic efficiency. They find further that "a large part of the gains generated by new suburban development are simply shifts away from taxpayers, current commuters, and many others who bear the burden of the social and public costs created in development's wake."<sup>38</sup> For land markets to operate efficiently, these costs and benefits must be fully reflected in market transactions. Some costs are not reflected in the market because of policies

designed to promote national goals such as home ownership and universal utility access (for example, phone, water, and electricity). These national goals can be addressed without biasing the market.

### Home Ownership

Home ownership—a goal that we share as a nation—is also often thought to be driven largely by supply and demand. Yet to enable greater home ownership, the federal government heavily subsidizes home buyers through the tax code—by deductions of mortgage loan

interest and property tax payments and by capital gains tax deferments. It is estimated that these combined subsidies were worth \$83.2 billion in 1995.<sup>39</sup> How do these subsidies affect development patterns? By creating a tax advantage for the purchase of larger, more expensive housing, these subsidies tend to favor new, low-density developments located outside the central metropolitan core.<sup>40</sup> In 1993, for instance, households with annual incomes over \$100,000 received 38.9 percent of homeowner subsidies even though they represented only 5 percent of the population.<sup>41</sup>

In addition, although Section 1034 of the tax code was recently changed so that capital gains taxes on most home sales have been eliminated, the code helped create our current patterns of development. Section 1034 allowed home sellers to defer capital gains tax liabilities when buying a home of equal or greater value, creating an incentive for sellers to move to a more expensive home to gain a tax advantage. Bier and Maric estimated in 1994 that because of Section 1034, movement outward by home sellers in the Cleveland area was 16 percent greater than would otherwise be expected.<sup>42</sup>

### Utility Pricing

Low-density developments generally enjoy subsidized utility costs because utility pricing is based on average, rather than actual, costs of providing services. Cable television; development impact fees; and electric, phone, water, gas, and wastewater services all charge

on an average-cost basis. For example, one regional Bell telephone operating company provided a rough estimate that, compared to the monthly costs of serving customers in the central business district, it costs twice as much to serve households in the rest of the central city and 10 times as much to serve households on the urban fringe.<sup>43</sup>

Because all customers pay average costs, residents in more urban, higher-density areas subsidize those on the fringe. The same principle applies to development impact fees. Many jurisdictions have begun charging fixed development impact fees, regardless of the cost of serving the development. One official of a large western city reported that it costs the city \$10,000 more to serve a house on the urban fringe than a house in the urban core.<sup>44</sup> However, when these fees are based on average costs, each developer pays the same amount. This same phenomenon holds true to varying degrees for electric, phone, gas, water, sewer, and other linear services.

### Capital Costs of Water and Sewer

Good water and sewer service facilities are a prerequisite for development. Historically, the federal government has heavily subsidized the building of new water and sewer facilities with grant programs and revolving loan funds. Between 1972 and 1990, federal investments in wastewater systems, dispersed through the Construction Grants Program, totaled more than \$60 billion.<sup>45</sup> These funds were available primarily for building new infrastructure



*Home ownership is one of our shared national goals.*

rather than for operating or maintaining of existing infrastructure. The combination of grants for new infrastructure and the lower maintenance costs in new systems encourages growth at the fringe.

Infrastructure spending patterns within a jurisdiction have also played an important role in subsidizing development at the fringe. Myron Orfield, a member of Minnesota's House of Representatives, found that 23 percent of the existing sewer service area in Minneapolis in 1990 had less than capacity use. Rather than directing growth to this area, between 1987 and 1991 the region provided new capacity to 28 square miles of land at a cost of \$50 million per year. The capacity went primarily to serve expansion into the affluent suburbs. Orfield calculates that by 1992, the central cities were paying over \$6 million annually to subsidize the flight of their middle class.<sup>46</sup>

**ABLE 4**

### Subsidized Costs of a 200-acre "Leapfrog" Residential Development near Lexington, Kentucky

| Service                     | Total Additional Costs per Annum (1973\$) | Who Paid Additional Costs |
|-----------------------------|---|---------------------------|
| Water                       | \$8,766                                   | Consumers, Lexington area |
| Gas                         | \$1,013                                   | Consumers, Lexington area |
| Telephone                   | \$13,931                                  | Consumers, statewide      |
| Electricity                 | \$937                                     | Consumers, statewide      |
| Sanitary sewerage           | \$9,016                                   | City taxpayers            |
| Refuse collection           | \$638                                     | City taxpayers            |
| Fire protection             | \$208                                     | City taxpayers            |
| Police protection           | \$7,425                                   | City taxpayers            |
| Mail service                | \$374                                     | Federal taxpayers         |
| School bus service          | \$737                                     | County taxpayers          |
| Commercial delivery service | \$54,677                                  | Consumers, Lexington area |
| Bus commuting               | \$1,490                                   | Consumers, Lexington area |
| Road and street maintenance | \$122                                     | County taxpayers          |

Source: R. W. Archer, "Land Speculation and Scattered Development: Failures in the Urban-Fringe Market," *Urban Studies* 10, 1973. U.S. Congress, Office of Technology Assessment, *The Technological Reshaping of Metropolitan America*, 1995.

#### Automobiles

The Office of Technology Assessment estimates that automobile drivers pay about 73 to

88 percent of the monetary costs of automobile use. If nonmonetary costs, such as air pollution, are included, the costs paid by users decrease to between 53 to 69 percent.<sup>47</sup> These

subsidies to automobile users encourage longer commutes and more automobile-dependent communities. The World Resources Institute estimated in 1991 that if drivers paid the cost to internalize air pollution, congestion, parking costs, and so on, the cost of gas would be close to \$7 per gallon.<sup>48</sup> In addition to encouraging longer travel distances, the low price of gas contributes to the nation's reliance on foreign oil. In 1997, the United States was a net importer of merchandise. Net merchandise importing amounted to \$182 billion, of which oil imports were \$63 billion, or about one-third of net merchandise imports.<sup>49</sup>

As with spending patterns for water and sewer, those for roads are important here as well. Representative Orfield estimates that \$1.08 billion was spent during the 1980s to add capacity to the Minneapolis road system—85 percent of it on capacity serving new development on the fringe. In the next decade, all of the budget for road systems has been earmarked for capacity expansion in the suburbs.<sup>50</sup> These expansions occur despite the fact that, of the 25 largest regions in the country, the Twin Cities has the second lowest population density and some of the least congested freeways.<sup>51</sup>

Cities have long maintained that transportation spending patterns have favored exurban areas. A 1996 study by the Surface Transportation Policy Project found that these claims have a basis in fact. The study looked at roadway spending on a per-capita basis and found that cities and suburbs received \$54, while nonurbanized areas received \$115 per

capita and rural areas took in \$98 per person. The study points out that this spending pattern prevailed despite transportation legislation that had a monetary set-aside for urban areas.<sup>52</sup>

### Cumulative Effects of Subsidies

It is difficult to predict the cumulative effect of these different subsidies on a particular development. Archer quantified some of these subsidies for one leapfrog development in Lexington, Kentucky. The results, presented in Table 4, show that for a 200-acre development, subsidies amounted to \$99,334 in 1973 dollars.<sup>53</sup>

Archer's study is an illustrative example only and does not account for many of the factors discussed above. It demonstrates that development is not simply the free market efficiently responding to consumer demands. Rather, in addition to consumer preferences, development is influenced by a number of nonmarket factors.

### Consumer Preferences

Any investigation of the market's influence on development patterns would be remiss without a discussion of what consumers want. Consumer choices are based on a number of factors. Typically, consumers consider price and proximity to work, family, or schools. They also might consider transportation options, local services, long-term investment value, and flexibility of space. Not surprisingly, a wide variety of preferences exists.

Indeed, in a market survey conducted by the market research firm American Lives,

prospective and recent home buyers were asked about their preferences for types of neighborhoods and amenities. Specifically, the survey looked at the market potential for neighborhoods that reflect the traditional town model typical of pre-1950 development patterns. The survey results are shown in Table 5.

The market researchers concluded from these and other data that consumers are not happy with the current styles of development and that conventional suburbs are no longer a safe bet. They note further that a major objection to more traditional town-like development is density. Lower densities are perceived to

solve the problems of noise, safety, privacy, and convenient access by car. The study's authors believe that these objections can be overcome with smart design that combines, in very specific ways, elements of the old and the new.<sup>55</sup>

Though more examples are needed, sales figures from recent projects provide support for this view. A study of six developments in the Southeast United States—incorporating higher densities, strong public spaces, and a mix of uses—showed returns of 25 to 45 percent compared with 9 percent for more standard projects.<sup>56</sup> The Woodlands, a master-planned community in Houston, Texas, incorporates a mix of incomes, keeps housing and jobs together, and preserves the site's environmental features. Compared to other master-planned communities in the Houston region, the Woodlands has ranked first in annual new home sales every year since 1990.<sup>57</sup>

Consumers' desires will change as demographics and values change. American Lives' data indicate a growing desire for community, open space, and town-centered living with less reliance on the automobile. Demographic shifts underlie and support these trends. The "typical" family—a married couple with children—described 40 percent of all households a generation ago; it now accounts for only 26 percent.<sup>58</sup>

Currently, a full third of the home-buying market is over the age of 45.<sup>59</sup> In surveys of this market segment, most people want to live in communities with a diversity of ages. Three of their top four location priorities are based on

## WHO PAYS THE BILL?

*Firms locating in outer suburban areas reap most of the benefits, while most of the costs...are borne by unemployed city residents, commuters who bear the cost of congestion, accidents, and pollution, and taxpayers who foot the bill for subsidies for transportation, home ownership and other public subsidies.*<sup>54</sup>

**ABLE 5****Consumer Preferences for Neighborhoods and Amenities**

|  | Percentage of Respondents |         |         |
|--|---------------------------|---------|---------|
|  | For                       | Neutral | Against |
| <b>Town center</b>   |                           |         |         |
| A. Town center has a village green surrounded by shops, civic buildings, churches, etc., and is the focal point for residential neighborhoods clustered around it.   | 86                        | 8       | 6       |
| B. No single community center: shopping and civic buildings are distributed along commercial strips and in malls.  | 23                        | 20      | 57      |
| <b>Street patterns</b>   |                           |         |         |
| A. Narrow streets are centered on the town square and in a city block grid to encourage walking and discourage in-town driving. Traffic flows through all residential and commercial streets.  | 55                        | 17      | 28      |
| B. Streets are wide to make it convenient to drive in town. Shopping areas are farther apart so that walking is not practical. Neighborhoods have cul-de-sacs and courts that are linked by higher-speed major streets.  | 46                        | 20      | 34      |
| <b>Parking and cars in town</b>  |                           |         |         |
| A. Town is less automobile oriented. Town center has parking structures instead of large lots. Higher-density development with walking and biking paths encourages people to get around town without a car.  | 69                        | 16      | 15      |
| B. Auto-oriented suburbs have acres of parking around commercial and public areas. Things are far enough apart that you need to drive to most places, especially for shopping.   | 25                        | 21      | 54      |
| <b>Density of residential areas</b>  |                           |         |         |
| A. Lots are smaller, with houses closer to the street and smaller front yards in the style of small-town neighborhoods. Sidewalks are on both sides of narrower streets. The focus is on shared community recreation areas instead of larger private yards.          | 33                        | 19      | 48      |
| B. Larger lots and wider streets make lower-density neighborhoods. Houses are set farther back from the streets with larger yards. There is less space for shared community recreation.  | 73                        | 14      | 13      |
| <b>Mix of housing types and ages of residents</b>  |                           |         |         |
| A. There is a wide range of housing types—single-family detached, row houses, duplexes, and apartments—in neighborhoods. Town center also has apartments above shops. Neighborhood is designed to attract a wide range of ages, including seniors and young singles. | 44                        | 17      | 39      |
| B. Strict zoning separates single-family areas from neighborhoods with higher-density housing. Narrow age range and fewer family types are found within neighborhood.  | 50                        | 21      | 29      |

Source: Brooke H. Warrick, conference report at "Techniques in Traditional Neighborhood Development," 1997.

easy transportation: access to shopping, access to family and friends, and access to medical care. And of mature home buyers who intend to move, most will move to smaller houses with smaller yards to reduce cleanup and yard-work.<sup>60</sup> Mature buyers' preferences, in combination with the overall trend in the United States toward smaller households, will create a greater market for smaller houses on smaller lots—especially where density's perceived problems can be solved through smart design.

## GROWTH AS AN ECONOMIC DEVELOPMENT STRATEGY

Many local jurisdictions have come to equate attracting new business with improving the location's economy. As Rio Rancho, New Mexico, did, some cities have found that when all the impacts are taken into account, the new business does not have the promised economic development value.

Sometimes development represents a net increase in economic activity, but it may also simply shift economic activity from one area to another. The new shopping mall on the edge of town may result in the closure of shops downtown. Since many smaller stores, like those near Portland's light rail, rely on the foot traffic created by a successful group of stores, when a few close, the entire area may fail. Thus, the new jobs created by development may simply be a transfer from one area to another, and they certainly call for high levels of scrutiny when public subsidies are being considered.

## HISTORIC PRESERVATION IN MARYLAND AND VIRGINIA

*Studies of Maryland's tax credit show that it will create \$9.7 million in investment, add 122 jobs worth \$11.3 million in wages, and increase property values by \$2.4 million. Already, residential renovations caused property values within a historic district in Fredericksburg, Virginia, to rise 674 percent between 1971 and 1990 compared with homes outside the district, which rose 410 percent.<sup>64</sup>*

Many communities have refused an "either/or" attitude and have turned this problem on its head by providing incentives for locating "big-box" stores and other major retail chains downtown, thereby increasing competition and adding value to the existing retail chains with increased pedestrian traffic. One example of this strategy is Recreational Equipment Incorporated's (REI) decision to build its new, inno-

vative flagship store in central Seattle, rather than in an outlying mall. In Carroll, Iowa, a Wal-Mart agreed to locate downtown instead of at the fringe and to pay for half the cost of a new parking lot that could be used by everyone, not only Wal-Mart customers. Other national retailers have followed Wal-Mart's example, strengthening Carroll's economic vitality.<sup>61</sup>

For an economy to truly develop, local governments must also be cognizant of the nonmarket costs associated with different development patterns. For instance, will a mall on the fringe cause greater or reduced congestion and air pollution? Will it add to or detract from the community's social fabric? Is the downtown a focal point for the community? Does it define the community in any way? These "livability" factors are increasingly important in attracting mobile high-tech businesses. A study of the factors that anchor people to their home communities found a correlation between strong small businesses and a high level of civic engagement in small towns. The study concludes that the "social capital" of a community "enhances [the] community's ability to compete for jobs and residents."<sup>62</sup>

To further investment in existing communities and create and preserve social capital at the same time, some states have turned to direct incentives for historic preservation. This shift makes sense especially in communities in which tourism and related activities, such as conventions, are a major source of employment and tax revenues. Seven states currently have

tax-reduction programs for restoration projects. Maryland's recently enacted program passed without opposition in the State House. Maryland House Speaker Casper R. Taylor, Jr. said the law "puts the state on a road towards improving the quality of life by creating a stronger economy through historic preservation and tourism."<sup>63</sup>

### Competition for Growth

Often, the question is not where within a jurisdiction a business will locate but where within a metropolitan region. Jurisdictions frequently will compete for tax base—including new residents and businesses. Although a community competes to further its own gains, individual jurisdictions are more dependent on the region than they want to admit.

Experience in Kansas City and elsewhere has shown that today's prosperous suburb may become tomorrow's community in decline. Orfield points out that contrary to popular belief, "during the 1980s the largest flight of the middle class did not occur in the nation's cities, but in the inner ring suburbs of Washington, D.C., Atlanta, and Chicago."<sup>65</sup> In a five-year period, Minneapolis residential property surrounding the expanding core of poverty lost 15 to 25 percent of its value. As this phenomenon spreads into the older suburbs, it frequently accelerates and intensifies. Middle-income, single-use suburbs lack the central city's elite neighborhoods, parks, entertainment amenities, and well-developed social services to respond to instability.

## LOST VALUE

*"There's nothing worse than having neighboring suburban municipalities competing with one another for resources and tax base," said one interviewee.*

*"The schools go downhill, middle-class neighborhoods become lower-class. It can be over quickly." Sound familiar? It's exactly what has happened to many older cities, and the value loss to investors can be staggering.*<sup>66</sup>

Portland, Oregon, presents a contrast with its vibrant core and strong property values. The policies there to expand and improve the transit system are combined with parking restrictions in the downtown. At the same time, Portland encourages a mixture of uses and enforces an urban growth boundary. The results have been a vibrant downtown, with a doubling in the number of jobs in the past 20 years and \$1.3 billion in development adjacent to the transit line.<sup>67</sup>

## ENVIRONMENTAL IMPACTS

Growth and development directly affect environmental quality. Many communities are asking questions about the relationships between the number of commuter trips and regional air quality and about the impact of habitat loss on the health of wildlife species. Although the impacts of growth on environmental quality can be complex, they can be reduced by modifications in the design of new development.

### Development Patterns and Air Quality

Post-World War II development patterns have made car ownership essential to daily living and have often made other transportation modes impractical. As we have become more dependent on the automobile, we have driven more and more.

While Americans averaged 4,485 automobile miles per person in 1970, this distance increased to 6,330 miles per person in 1993—a 41 percent increase. Between 1983 and 1990, the average trip for all purposes rose from 8.68 to 9.45 miles.<sup>68</sup> Although many factors besides development patterns influence travel, there is compelling evidence that development patterns play a major role. The 1990 Nationwide Personal Transportation Survey indicated that 38 percent of the growth in vehicle miles traveled was due to increasing trip distance.<sup>69</sup>

Pollution from motor vehicles is responsible for over one-quarter of the nitrogen oxide, carbon monoxide, and volatile organic com-

pounds released into the air each year.<sup>70</sup> Technological approaches such as catalytic converters and reformulated gasoline have reduced the impact of automobile-related air pollution and have improved air quality dramatically. However, the Environmental Protection Agency predicts that increases in vehicle miles traveled will begin to erode these gains within the next eight years.<sup>71</sup>

Compact, mixed-use, pedestrian, and transit-oriented communities have a positive impact on air quality by providing convenient travel alternatives. The Nationwide Personal Transportation Survey of 1990 shows that households in city centers take 18 percent fewer trips, make on average 18 percent shorter trips, and travel 36 percent fewer miles.<sup>72</sup> City center residents not only reduce “cold starts” (starting the car when it hasn’t been used for the past few hours), a major source of ozone pollution, but also cut vehicle miles traveled, further reducing smog-forming emissions.

Studies of growth patterns in Portland predict that following a strategy of mixed uses with transit- and pedestrian-friendly design would lead to 7 percent fewer vehicle trips and vehicle miles traveled, less congestion, and reductions in nitrogen oxide, hydrocarbons, and carbon monoxide.<sup>73</sup> A similar study of the Washington, D.C., region conducted by the Chesapeake Bay Foundation and Environmental Defense Fund also showed that reductions in congestion, vehicle miles traveled, and vehicle trips were achievable.<sup>74</sup> Critical factors in

generating trip reductions appear to be a good balance between jobs and housing and a mixture of uses, including retail and office centers.<sup>75</sup>

### Water Quality: Urban Runoff

Streets, parking lots, rooftops, and other impervious surfaces all contribute to urban runoff. Parking lots generate almost 16 times as much runoff as an undeveloped meadow.<sup>76</sup> As the amount of paved and covered surfaces within a watershed grows, stream beds are widened, flooding is increased, and groundwater recharge is reduced. As the amount of impervious surface within a watershed rises above 10 percent, impacts on local water



*Impervious surfaces contribute to urban runoff.*

bodies are significant. Beyond 30 percent they are quite damaging.<sup>77</sup> The most recent National Water Quality Inventory reports that runoff from urban areas is the leading source of damage to estuaries and the third largest source of water-quality damage to lakes.<sup>78</sup>

Total runoff can be reduced by clustering development and leaving larger open spaces and buffers. Although compact development generates higher runoff and pollution levels within the development, it is more than offset by reductions in the undeveloped areas. A study comparing growth scenarios for a town in South Carolina found that runoff from the spread-out, large-lot scenario was 43 percent higher than the compact “town” scenario. In addition, sediment, phosphorous, nitrogen, and other pollutants leaving the site were reduced.<sup>79</sup>

### Water Use

While water tends to be plentiful in the eastern and southern parts of the United States, many areas in the western states suffer from periodic or chronic water shortages. One way to reduce water usage is to encourage compact developments. Because they have relatively smaller areas of turf and landscaping, which are major sources of water demand, compact developments require less water. A major study in New Jersey estimated outdoor water use by housing type. The study found that larger, single-family detached units consume 30 gallons of water per day for outdoor use, 6 times the amount that single-family attached or multi-family units use. In rural areas,

single-family detached units were estimated to consume 50 gallons of water per day for outdoor use, 2 to 3.5 times the amount of other rural activities, such as farming.<sup>80</sup>

### Brownfields and Greenfields

An intense effort is under way within cities, counties, and communities across the nation to clean up and redevelop previously used, abandoned, and sometimes contaminated industrial sites. Known as “brownfields,” these sites are an eyesore for citizens, losers on local government tax roles, and anathema to developers. Yet successful cleanup and reuse of brownfields is key to environmental quality, economic prosperity, and fiscal health.

Brownfield redevelopment to date has focused on removing the barriers associated with potential environmental liability on these sites. Although managing environmental liability will make brownfield redevelopment easier, other market and nonmarket forces continue to favor investment on the urban fringe. Instead of investing in existing communities, subsidized development at the fringe encourages their abandonment. This bias can be damaging to the economy and the community.

Agricultural lands, for instance, can be a major employer, a fiscal surplus for the local government, and important to the character of the community. On a national scale, the amount of agricultural land lost to development is a small portion of total land available for agricultural use,<sup>81</sup> but it is generally some of the best agricultural land,<sup>82</sup> and at the local

level the impact can be sizable. Between 1982 and 1987, the Central Valley of California (California’s most productive agricultural region) lost nearly 500,000 acres of productive farmland to development.<sup>83</sup> Lancaster County, Pennsylvania, lost 50,000 acres between 1981 and 1990.<sup>84</sup> A New Jersey redevelopment plan showed that a 43 percent reduction in loss of open space could be achieved by better directing growth.<sup>85</sup>

The New Jersey redevelopment plan also showed that with strategic protection of the most sensitive environmental areas, 29,000 acres of habitat and sensitive land could be preserved while still accommodating all the necessary new development.<sup>86</sup> Small steps like this can go a long way. A 1995 Defenders of Wildlife study notes that habitat loss is the single factor most likely to cause extinction for thousands of plants and animals.<sup>87</sup>



*Undeveloped fringe of an urban region, San Francisco Bay Area.*

### The Natural Economic Infrastructure

Many nonfarming communities also depend on their local ecology for their local economy. In South Carolina, for example, threats posed by urban runoff and other pollution caused about one-third of the shellfish beds to be closed or restricted in 1995 with large financial impacts on the shellfish industry.<sup>88</sup> Concerns about urban runoff are likely to grow as development of the South Carolina coast continues.

Economy is also often based on ecology when the local economy is dependent on tourism, such as in the Sierra Nevada region of California and Nevada. In 1994, the Sierra Business Council was formed to secure and enhance the economic and environmental health of the region. The council—450 businesses ranging from small stores and bed-and-breakfasts to banks, timber companies, and Lake Tahoe casinos—commissioned an audit of the natural, social, and financial capital of the region. The council sees this information as vital to the region’s ecological and economic future.<sup>89</sup>

The value of protecting the environment is further supported by a large body of empirical studies showing that buyers are willing to pay more for land if it is close to public open space, water bodies, parks, or publicly owned greenbelts.<sup>90</sup> This preference, of course, translates into better land values for the property owner. Studies in Dayton and Columbus, Ohio, found that residential properties near a park sold for 7 to 23 percent more than similar properties farther away from open space.<sup>91</sup>

## COMMUNITY IMPACTS

Each place has its own story. Urban cores such as downtown Columbus, Ohio, live with the consequences of disinvestment, population decline, and concentration of poverty. Residents know firsthand the effect this decline has on their community. Longtime residents remember when all the neighbors knew each other and took care of their properties. Since 1960 the area has lost three-fifths of its population and, in 1990, their neighborhood was the poorest in Columbus. As jobs have moved to the suburbs, workers in the older areas of the central city found it increasingly difficult to get to where the jobs are, exacerbating decline.<sup>92</sup> Formerly perceived as an urban problem, now many suburbs find Columbus's story is increasingly familiar. Seeing disinvestment headed their way, suburbs around Cleveland have formed a group called First Suburbs to encourage investment in existing communities.

But even when suburbs are economically healthy, many residents believe that their community fabric is weak. A recent article in *American Enterprise*, "Are Today's Suburbs Really Family-Friendly?" argues that typical suburban development is "desirable for families not so much for what it is as for what it isn't: it is not dangerous, not dirty....It offers more physical security than cities and greater economic security than the average small town."<sup>93</sup> The article states that suburbs isolate those without cars—the elderly, the young, and the infirm. The neg-

ative impacts of isolation on these groups is well documented.<sup>94</sup> When the *Wall Street Journal* asked one suburban mother what social reform would most improve her quality of life, she replied, "Lower the driving age to 10." She had put 40,000 miles on her minivan in the previous 18 months ferrying her three kids around the suburbs.<sup>95</sup>

New development, and how it occurs, profoundly influences community life in towns and rural areas as well. In Lancaster County, Pennsylvania, the strong cultural traditions of the Amish community were rapidly diminished by the influx of new residents. The charm and slow pace of a 200-year-old agricultural community were rapidly worn away by increasing tourism and outlet malls. The sense of place, commitment of families to the land, and authentic Amish traditions that attracted new residents to this part of Pennsylvania 10 or 15 years ago no longer provide the same central focus for the community. Along with the loss of more than 50,000 acres of prime farmland to residential and commercial development, the residents of Lancaster County have also had to give up a large measure of the distinctive cultural heritage for which their community was famous.<sup>96</sup>

### Putting the Pieces Together

Clearly, growth and development can cut two ways. Growth can improve quality of life by adding services, creating opportunity, and enhancing access to amenities. It can also



*Community life in a pedestrian neighborhood of Toronto.*

drive disinvestment, reduce competitiveness, and degrade the environment. Businesses, community leaders, developers, and local governments need to work to ensure that new growth improves the economy and environment of existing communities. In building new places, we must build places people want to live in for what they are, rather than for what they are not. This is smart growth.

## Lessons Learned: Your Community

The market economy and current government policies do not guarantee smart growth. But the market economy does lean toward efficient allocation of resources, and government does have the role of balancing individuals' and society's rights and needs. Smart growth uses both these elements to create a viable alternative to the “unfettered” versus “no-growth” stalemate of the past. Communities have led this sea change, innovating to make growth a solution rather than a problem. Communities that have had the most success creating smart growth share some key elements. The following list provides a starting point for your community:

- Look beyond the next development proposal. Know where your community is headed by thinking about the cumulative effect of hundreds of development proposals. A full build-out analysis can point out where your community needs to focus its attention on growth.
- Recognize that building your way out of a crisis is a complex process that requires looking beyond the immediate situation and paying attention to the indirect effects of

building. By looking at the full costs of new freeways to ease congestion or large subsidies to attract businesses, your community may be able to use a crisis to formulate brand-new approaches.

- Create good information. Don't forget that predictions of the impacts of growth are based largely on the status quo. Develop realistic scenarios for alternatives to the status quo to illustrate better outcomes. And make sure complex information is accessible to a broad group of people.
- Create an alternative vision for your community. Form groups with diverse membership to discuss and develop a vision of the community's future. These groups often can find common ground and create political will.
- Identify and cultivate strong leaders. Strong leadership and clear articulation of a vision are crucial to gaining support for change.
- Create benchmarks by which to measure progress. Sometimes simply identifying current statistics can catalyze change.
- Seek regional solutions for regional problems. Cities, suburbs, and neighboring jurisdictions can often form win-win solutions by focusing on common interests such as a significant natural feature in the region.

## CONCLUSION

This primer has shown how market imperfections and public policies increase expansion into the undeveloped fringes of regions, encouraging investment in as-yet-unbuilt communities over existing ones. But as we've also shown, existing communities can better capture the benefits of growth once they understand the old patterns and begin changing them. These changes can lead to smart growth that engages all the stakeholders in development to add value to existing communities while also rewarding those who invest in growth. Stay tuned to the Smart Growth Network to learn more about alternative growth patterns and how to implement them.

## APPENDIX A

### STARTING POINT: THE BOTTOM LINE

The following set of questions is a tool to help identify which kinds of impacts your community might need to address. The questions apply to a single development or to policy, and they cover a range of fiscal, economic, environmental, and social factors. The questions also address both short- and long-term impacts. The relative importance of each question depends on the particular goals of your community.

#### FISCAL: IMPACTS ON COSTS OF SERVICES AND REVENUES

1. How will this project change our school system?
  - a. By how much will the costs change and will the development affect state grant formulas?
  - b. Will there be more children to educate, and can the current school facilities accommodate the increased number of students?
  - c. Will the new residents expect a different level of education than currently provided?
2. Will other public services change as a result of this project?
  - a. By how much will the costs change?
  - b. In particular, will there be a greater need for police and fire protection?
3. Will infrastructure costs (such as water, sewers, and roads) change due to this project?
  - a. Can or should individual wells and septic systems be replaced with publicly provided water system and sewage treatment?
  - b. Will the current systems need to be enlarged to provide greater water and sewage capacity? Road capacity? Other infrastructure capacity?

4. Will local tax revenues increase as a result of this project?
  - a. If so, by how much?
  - b. Who would receive the additional revenues—the municipality, the county, or the state?
5. Will the project “pay for itself”?
  - a. In other words, will the tax revenues that the project generates cover the costs of the additional services needed—at each level of government?
  - b. Is there a need for impact fees (or other forms of payment) to cover the additional costs?
  - c. Can impact fees be defended in court?

#### ECONOMIC: IMPACTS ON THE LOCAL AND REGIONAL ECONOMIES

6. Will the project make the community more competitive in a commercial sense and more attractive to other businesses?
  - a. How many jobs will the project create?
  - b. Will these be high-paying, stable jobs?
  - c. Will the project encourage other new businesses?
  - d. Will the project increase personal income in the community?
7. What will be the project’s impact on the cost of housing and property values in the community?
8. Will the project have a negative effect on other communities in the area?
  - a. Will the jobs created employ people in this community or draw commuters from other areas?
  - b. Will the project simply shift activities from one part of the area to another without creating new jobs?

## ENVIRONMENTAL IMPACTS

9. Will the project affect the amount of available parks, greenspace, and natural habitat?
  - a. If so, will it increase or decrease these areas?
  - b. Will the project result in an increased demand for parks and recreational spaces?
  - c. Will the project result in a loss of plant or animal diversity?
10. How will the project affect the consumption of energy and other natural resources?
  - a. How much open space or agricultural land will be consumed by the project?
  - b. Do the location and design of the development encourage the use of public transportation?
11. What will be the project's impact on water and air?
  - a. Can the current water supply support the development?
  - b. What will be the project's impact on the availability of solid waste disposal? Air quality? Wastewater treatment?
  - c. Will the project result in an increase in stormwater runoff or a loss of natural stormwater treatment?
  - d. Will there be an increase in downstream flooding?

## SOCIAL IMPACTS

12. How will the project change the character of the community?
  - a. Will social interaction be encouraged or discouraged by the project?
  - b. Will parents feel that it is a "good place" to raise their children?
  - c. Will the project allow or encourage a mix of generations and ages in the community?
  - d. Will the project encourage a mixture of income earners in the community?
13. How will the project affect accessibility within the community and between this community and the rest of the area?
  - a. Will traffic congestion increase?
  - b. Will a wider range of transportation options (such as public transit) be available?
  - c. Will people who cannot drive (because of age or because they do not own a car) be able to get to jobs, shopping, and services such as doctors?

## LONG-TERM CONSIDERATIONS

14. What other land-use changes will be encouraged by this project?
15. How will the impacts evolve over time?

## APPENDIX B

### TOOLS TO SHAPE GROWTH PATTERNS

As a preview of what the Smart Growth Network plans to offer, this section presents some of the many alternative growth patterns and tools for communities and local governments.

#### ALTERNATIVE GROWTH PATTERNS

Market researchers are finding that consumers are not happy with the current styles of development and that conventional suburbs are no longer a safe marketing bet. They note further that a major objection to more traditional town-like development is density. Lower densities are perceived to solve the problems of noise, safety, privacy, and convenient access by car. These problems can be overcome with “smart design” that combine, in very specific ways, elements of the old and the new.<sup>97</sup>

Two widespread alternative physical approaches are infill development and neotraditional development. These approaches tend to be of higher density with less emphasis on the automobile than conventional development patterns. These development patterns use urban design, architecture, and open space to shape higher densities into pleasing



*Mixed-use infill built on the site of an old gas station.*

and desirable neighborhoods. Although infill and neotraditional development are explored below, they are only two of the many possible approaches that can result in smart growth.

#### Infill

Infill intensifies current development patterns in existing neighborhoods. Infill often saves a community money by making better use of existing infrastructure so that the community can make other investments in amenities such as open space, education, or crime prevention. Greater population densities resulting from infill can also support both neighborhood businesses and a wider range of choices with respect to public transportation.

In some instances, infill may occur on brownfields. As defined by the U.S. EPA, brownfields are abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. Brownfield redevelopment encourages environmental cleanup, brings jobs to underemployed communities, revitalizes deteriorating neighborhoods, and counteracts sprawl. Examples of infill sites on brownfields include overlooked, underdeveloped, or vacant parcels in an area with existing infrastructure. The presence of pre-existing infrastructure for transportation and other services facilitates infill.

#### Neotraditional Communities

A growing trend in urban design has been toward neotraditional development, or “new urbanism.” These forms of development are based on traditional, small American towns with strong civic centers. Neotraditional development can occur as infill or in place of new subdivision development. The new urbanism wears many faces, ranging from the glossy resort village of Seaside, Florida, to the neighborly Kentlands in Gaithersburg, Maryland. These neotraditional communities share many common goals:

- Return to pedestrian or “village” scale
- Decreased reliance on the automobile
- Smaller streets in grid patterns
- Shallow front yards with porches
- Greater efficiency of public infrastructure
- Reduced energy consumption
- Multiple-use development in compact neighborhoods
- A vital town center

Neotraditional developments are not easily financed, however, since they are still seen as a small niche rather than as an evolutionary step in conventional development. The new urbanism is winning over many converts among developers, public officials, and new home buyers who appreciate its economic, environmental, and social elements. Even the Disney Development Corporation near Orlando, Florida, is constructing a neotraditional community known as “Celebration.” In *Emerging Trends in Real Estate: 1997*, the Real Estate Research Corporation recommends mixed-use communities with appealing transit and pedestrian facilities as a good investment likely to hold value longer than a single-use, low-density development.<sup>98</sup>

New urbanism has frequently been applied to large, brand-new communities such as the 1,045-acre, 3,370-unit Laguna West. But Mountain View, California, has revived a moribund downtown using new urbanist concepts. The town widened sidewalks to accommodate pedestrians and got rid of on-site parking requirements for stores and restaurants on the main shopping street. The town also built a neotraditional housing development nearby. The development used the existing neighborhood street grid, and the housing sold out before construction even began.

## TOOLS

**Comprehensive (Regional) Plans**—These are most useful when they address a broad range of growth issues (economic, fiscal, social, and environmental) and show the functional linkages among them (for example, how different growth scenarios are likely to affect infrastructure costs or employment opportunities).

**Transferable Development Rights (TDRs)**—These come in many forms and typically allow an owner/developer to develop property in a desired location at a higher-than-normal density in exchange for not developing in other parts of the community. At least 28 states are now using TDRs, which in most cases act as overlays to existing zoning maps and subdivision regulations.

**Habitat Conservation Plans**—Similar to transferable development rights,

these plans allow for a limited “take” of endangered species in exchange for certain measures to protect and restore habitat. About 40 plans have been approved by the U.S. Fish and Wildlife Service, and another 150 are in progress.<sup>99</sup>

**Tax Increment Financing**—In use since 1952, local tax increment financing permits local governments to target increases in local property tax revenues for the support of particular development activities. Typically, local bonds are issued to finance infrastructure improvements for a particular project, and the enhanced tax revenues over time are used to pay the reduced bond interest and to retire the bonds.

**Variable-Use Value Assessments**—In general, these incentives permit local governments to tax certain desirable land uses—such as the preservation of farmland and open space—at lower rates, either through lower assessments or through lower tax rates. Frequently, the incentive is linked with a requirement for payment of forgone taxes if the “protected” land is converted to another nonprotected use category within a certain period of time.

**Building Codes and Ordinances**—Building codes and ordinances can enable smart growth by including provisions for accessory units, cluster zoning, and variance process to allow flexibility for developers who meet community objectives.

**Linkage Fees and Impact Assessments**—Frequently used in larger cities, these fiscal tools allow local governments to offset the negative impacts of local real estate development with additional revenues paid by the developer. Impact assessments usually help underwrite the costs of additional infrastructure and services needed by the development. Linkage fees are used to channel some of the profits from developing desirable commercial sites to housing and job training programs.

**Urban Growth Boundaries (UGBs)**—By legally distinguishing those areas that can be developed (those inside the boundary) from those that cannot (those outside), a UGB simultaneously preserves open space and encourages more compact development. One result is that property values inside the UGB tend to rise while those outside tend to fall. Although

they are not a new idea (Portland, Oregon, established a UGB in 1979), UGBs have been receiving more attention recently.

***Infrastructure Investments That Shape Development***—As described in Part II, the availability of highways, public transit, and water and sewer lines can encourage development in one location versus another. Therefore, decisions about where, when, and what kind of infrastructure to build are decisions about the location, form, and timing of development. Development patterns are influenced by small infrastructure decisions as well as major policies such as Portland’s commitment to its public transit system.

***Defining a Community’s Vision***—In many large cities, such as Seattle and Baltimore, and in smaller ones as well, the process of defining the community’s vision and goals is well advanced. Although each community differs in the content of its plans, almost all of the plans rest on a clear statement of principles and/or values that the community as a whole wants to preserve and enhance. These principles are usually developed collaboratively by a diverse group; they are general enough to be inclusive and relevant to different groups, but specific enough to acknowledge the unique character and resources of the region (for example, Seattle’s commitment to conservation of natural resources, with particular concern for preventing the further loss of Pacific salmon populations). This collaborative process also builds political will and a constituency for making the vision a reality.

***Development Impact Assessment***—Increasingly, communities are using formal impact assessment techniques to determine whether a development will move them toward their goals. Some states, like California, mandate these assessments through a state environmental quality act. The areas usually addressed in impact analyses are fiscal, traffic, public facility, and special impacts (such as air quality, noise, and exposure to particular hazards). To get the most out of impact analyses, a community can

- Develop a screening process and publish the results for all developments
- Use extensive impact analysis for only significant projects, not for minor ones
- Develop in-house capacity
- Try to minimize delays in the development approval process by establishing deadlines for reviews and local decisions.<sup>100</sup>

Impact analyses are gaining popularity because communities have realized the importance of knowing where growth is taking them. For most communities, impacts are measured against informal goals that already exist and share wide acceptance—fiscal soundness, good schools, and public and private investments that hold their value. By making goals explicit, the process becomes more democratic and also allows individuals, community organizations, and governments to prioritize their actions. Citizens can then better hold their governments and others accountable by measuring progress toward identifiable milestones.

## ENDNOTES

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