Sprawl and smart growth: Where do we go from here?

Michigan has entered the 21st century with a host of new challenges, including how to guide development in a way that improves quality of life for all its citizens. Michigan’s communities are at a critical juncture and must step forward now to meet the challenges posed by rapid growth. The majority of new development does not pay for itself in terms of the services it ultimately demands. Sprawl-based development also limits the options of future generations because land resources have been unnecessarily, and in some instances irretrievably, consumed.

Most development is really displaced from somewhere else and is not true economic development. Trends in the business community to develop less expensive rural sites hurt both the community being abandoned and the community being exploited because they have relatively cheap land and taxes.

The vision for Michigan was articulated in the final report of the Michigan Land Use Leadership Council (MLULC). The MLULC was appointed by Gov. Jennifer Granholm, Senate Majority Leader Ken Sikkema, and House Speaker Rick Johnson to study the effects of sprawl and to offer recommendations for change. Their final report entitled Michigan’s Land, Michigan’s Future (www.michiganlanduse.org) is perhaps continued on page 2.
Former Governor William Milliken was fond of saying, “The 37 million acres in Michigan is all the Michigan we will ever have.” Planners, planning commissioners, and local elected officials are responsible for making most of the key decisions that will guide future land use in Michigan. They must be well informed about the problems and prospects for improving land use decisions, hence strengthening the ability to achieve a sustainable future.

This first issue of the Michigan Society of Planning’s smart growth Tactics series will meet that information need. Seven other topics will be covered in this eight-part series, examining specific tools that local governments can use to achieve smart growth in their communities (see list in sidebar).

What is sprawl?

Before a definitive discussion about identifying and implementing smart growth tactics can commence, we first must consider the concept of sprawl. It is a concept that is elusive to define. One of the simplest definitions states:

“Sprawl is a low-density land use pattern that is automobile dependent, energy and land consumptive, and requires a very high ratio of road surface to development served.”


Sprawl is most often contrasted with compact development.

“Compact development is a pattern of land development with sufficient density of development and proximity between uses and activities to encourage pedestrian movement and efficient provision of public facilities and services.”


While these definitions are presented in objective terms, sprawl is not a value-neutral concept. Sprawl is widely considered to be an undesirable pattern of land development which is largely related to its impacts on farmland and open space, the higher long-term cost of public facilities and services associated with low density development, and its relationship to a host of central city woes. In contrast, a compact settlement pattern is considered to be positive, because it preserves farms and forests, is efficient to serve, and promotes redevelopment and repopulation of cities.

CHARACTERISTICS OF SPRAWL

This distinction can be clarified by examining some of the characteristics of sprawl. In the Transportation Research Board-National Research Council’s report Costs of Sprawl-Revisited (1998), noted urban expert Anthony Downs presents 10 characteristics of sprawl based on a review of many research findings.

Other topics in this series

This is the first in an eight-issue series on smart growth tools for local governments being published by the Michigan Society of Planning. Other topics in this series include:

- Development agreements
- Urban redevelopment strategies
- Multi-jurisdictional planning
- Density based zoning and mixed land uses
- Effective open space zoning to include farmland, natural beauty and critical environmental areas
- Community design
- Mobility options.
1. Low residential density (usually far more residential than nonresidential).
2. Unlimited outward extension of new development.
3. Spatial segregation of different types of land uses through zoning regulations.
4. Leapfrog development.
5. No centralized ownership of land or coordinated planning of development.
6. All transportation dominated by privately owned motor vehicles.
7. Fragmentation of governance authority over land uses between many local governments.
8. Great variances in the fiscal capacity of local governments because the revenue-raising capabilities of each are strongly tied to the property values and economic activities occurring within their own borders.
9. Widespread commercial strip development along major roadways.
10. Major reliance upon the filtering or “trickle-down” process to provide housing for low-income households. (Transportation Research Board-National Research Council’s report Costs of Sprawl-Revisited, 1998, p. 124)

So why does sprawl persist? Recent research has an answer.

“Sprawl occurs, in part, because local governments in the United States encourage this form of development via zoning and subdivision ordinances which, in turn, reflect the desires of a large share of their citizenry. This type of development is favored by the general public because it (among other factors):
1. dilutes congestion while accommodating unlimited use of the automobile;
2. distances new development from the fiscal and social problems of older core areas;
3. provides a heterogeneous economic mix;
4. fosters neighborhoods in which housing will appreciate;
5. fosters neighborhoods in which schools provide both education and appropriate socialization for youth; and
6. requires lower property taxes to pay for local and school district operating expenses than locations closer in.” (Transportation Research Board-National Research Council’s report Costs of Sprawl-Revisited, 1998, pages 1-2)

In the simplest sense, sprawl creates a much lower density development pattern than previously has occurred. In theory, the solution to sprawl is simple: Higher density. Unfortunately, as Stuart Meck, a leading sprawl and smart growth researcher at the American Planning Association observed in his April 2003 presentation to the Michigan Land Use Leadership Council, “The only thing citizens hate worse than sprawl is density!” So if the lack of density characterizes a development pattern known as sprawl, and the presence of density results in a compact development, and both are rejected by citizens, what are we left with? We are left with the status quo, which is a mix of sprawl and compact development, with increasingly more of the former than the latter. As the trends indicate (see sidebar on page 4) continuing the status quo does not create a future that is acceptable to most. This is why local governments cannot wait for the federal and state governments to act. Local governments must use the power available to them to make cities more desirable places to live, and to preserve sensitive lands and renewable natural resources.

We are faced with a dilemma caused by the law of unintended consequences.

“The law of unintended consequences, often cited but rarely defined, is that actions of people—and especially of government—always have effects that are unanticipated or “unintended.” Economists and other social scientists have heeded its power for centuries; for just as long, politicians and popular opinion have largely ignored it.” (Rob Norton, “Unintended Consequences”, the Concise Encyclopedia of Economics, on-line at http://www.econlib.org/library/Enc/UnintendedConsequences.html.)

Sprawl has largely been supported by a variety of government policies and programs which were adopted for other very good public reasons. These include everything from construction of the interstate highway system (intended to make it easier to defend America in times of war, to quickly empty its cities in times of nuclear threat, and to support trade and commerce); to adoption of large lot zoning (originally created as a way to preserve agricultural land under the notion that the cost of large lots would drive prospective purchasers away). But sprawl has led to a very inefficient use of existing infrastructure, especially where parts of large cities have been emptied of inhabitants who moved to larger lots in suburbs and rural townships.

So sprawl is the unintended consequence of government policies adopted for other perfectly good reasons. But not all unintended consequences are negative. In fact, as noted earlier, many citizens embrace the quality of life offered by sprawl. However, these benefits often are not equally shared; they belong primarily to those with the economic wherewithal to exercise that choice.
More reasons to be concerned

There are many reasons why people are concerned about sprawl. Perhaps the most frequently cited are the loss of farmland and open space (see Land use trends sidebar); the implications on future generations; and the high fiscal costs.

Chief among concerns for the next generation of children and grandchildren are related to:
• Where will our children and our parents live? Sprawl patterns do not provide affordable housing, and parents are finding that housing in suburban areas is not priced to meet either the needs of their children, or their elderly parents.
• Preserving choices for the future and for those who have fewer choices. If millions of acres of land are converted to large lot single family use at the expense of farms and forests, those future generations will have fewer renewable resource lands available, and will incur large costs to provide services since economies of scale associated with higher density will not be possible. Low income persons are

Land use trends

There are many different ways to measure sprawl and many different indicators. The simplest relate to overall drops in density and the relationship between population change and land use change. On both counts, Michigan emerges as a state in which there is a lot of sprawl.

Population density in the largest metropolitan areas in Michigan fell from 1990 - 2000 at different rates. Some of the areas where it was most significant are listed in Table 1.

In contrast, statewide, Michigan’s land use change to population change ratio is about 8:1. That means land is being converted at a rate eight times faster than the population is changing. However, the rate varies dramatically from region to region. See Table 2.

Another way of looking at land use change is by comparing actual land use/cover change over time. If the trends from 1980 to 1995 continue, by 2040, built areas in Michigan will increase by nearly three million acres (178%), but population will only increase by 1.88 million based on the conservative population projections used in the model. The new residents since 1980 will be responsible for converting nearly three times more land into the urbanized category as existed in 1980 but the population will have only grown by 19%.

The overwhelming bulk of the land use change accommodates new dwellings. This trend is heavily influenced by local zoning which for the most part allows single family homes on large lots in the community if all the vacant and developable land in the community were converted to accommodate new dwellings at the maximum density permitted in the zoning ordinance.

Another trend is the loss of farmland. Table 3 reveals the farmland loss in Michigan from 1978 - 2002. About one million acres of farmland were lost during this period, with about 361,000 acres (over 1/3 of it) in just the last five years. This is despite a change in the definition of farmland in the 1997 U.S. Agricultural Census that added over 500,000 acres by including Christmas tree farms. This rate of loss is equivalent to losing about 8.23 acres per hour every hour of every day.

The resultant land use pattern is typically the opposite of what attracted rural residents in the first place, and is probably not what they envisioned in the future.

Build out analysis is the process of calculating the total potential number of new homes and persons that could reside in a community if all the vacant and developable land in the community were converted to accommodate new dwellings at the maximum density permitted in the zoning ordinance.
increasingly trapped in older urban centers as those with the means to move do so.

- As older central cities empty, they lose attractiveness to young well-educated persons, who have abandoned Michigan at an alarming rate. Future generations are seeking vital, urban communities, and the dearth of “cool cities” in Michigan results in an out migration of our best and brightest to vibrant, healthy urban areas.

Fiscal impacts are the more immediate reason many people are concerned about sprawl. Consider the following:

“If sprawl is so desirable, why should the citizens of the United States accept anything else? The answer is that they no longer can pay for the infrastructure necessary to develop farther and farther out in metropolitan areas.

Dually supporting and underutilizing two systems of infrastructure—one that is being abandoned in and around central cities and close-in suburbs, and one that is not yet fully used in rural areas just beginning to be developed—is causing governments to fogo the maintenance of much infrastructure and the provision of anything other than growth-related infrastructure.

In sum, most of the American public is not unhappy with the current pattern of development in metropolitan areas—it simply can no longer afford it. Thus, the primary concern about sprawl development, at a time when the average American is satisfied with its outcome, is cost. And costs need to be measured not just in terms of capital improvement, but also in terms of resource depletion. Land in the United States is being consumed at triple the rate of household formation; automobile use is growing twice as fast as the population; and prime agricultural land, forests, and fragile lands encompassing natural habitats are decreasing at comparable reciprocal rates.”


What causes sprawl?

Why is sprawl the prevalent land development pattern, and not compact development? In the simplest sense it is because:

1. Sprawl offers many benefits to those with the economic means to enjoy them, and so comparatively wealthy consumers frequently choose development options that contribute to sprawl over options that support compact settlement patterns.
2. The federal and state governments historically subsidize key infrastructure that supports sprawl—especially roads.
3. Local municipalities are largely zoned to facilitate sprawl.
4. New development does not have to pay its own way.

There are, of course, more specific causes of sprawl than those listed above (see sidebar on page 6).

Obviously, all levels of government could address the ways in which it spends public money and adjust expenditures so they aren’t as supportive of sprawl and are more supportive of urban (re)development. Similarly, government at all levels could change the way it regulates land to provide incentives for compact development and discourage sprawl. Government action in either of these areas also affects consumer choice. No one wants to reduce consumer choice, and there are many ways that smart growth can actually increase consumer choice.

The most powerful tools include shifting the true costs of rural large lot development to those who purchase in such developments. This means that the choice will still be there, but it will cost more. Of course, that will make development in suburbs and cities more competitive, and should result in more people choosing to buy there, instead of in the country. Much attention in other parts of the country has focused on eliminating the public subsidies of sprawl, and shifted more of its real cost to those who buy the new development by means of impact fees, more special assessments, development agreements, concurrency requirements, and similar means.

Unfortunately, shifting from the status quo to a more fiscally sound approach to growth is not easy. In addition, the situation in Michigan is more complex than most states because of the large number of units of local government. In Michigan, over 1,850 units of local government have planning and zoning authority. An average state has 300-500 units of local government. That makes intergovernmental coordination and cooperation all the more important and much more challenging. Much of what we know about what works better has come from local governments that were willing to “break the mold” and try something different.
Compact neighborhoods within walking distance to shopping and jobs can be part of the solution.

A different vision

So if sprawl is not “the answer,” what different vision of the future is there?

In Chapter Three of Michigan’s Land, Michigan’s Future—Final Report of the Michigan Land Use Leadership Council, 23 characteristics of a better vision for Michigan are presented, along with three underlying goals: economic prosperity, environmental integrity, social equity. The Council said, “These three goals are interdependent and require government leadership in guiding public and private land use decisions and related policies that reflect the importance of balancing each goal in achieving sustainability.” (page 24)

MLULC VISION

The principle purpose of the Michigan Land Use Leadership Council was to make recommendations to reform land use decisions in Michigan so that we create sustainable and more livable communities. As noted earlier in this article, land use trends in Michigan, and those projected for the decades ahead, have raised serious concerns about the future of Michigan.

Throughout the over 150 recommendations the Council made to implement its vision for Michigan, one will find several frequent themes. These include the need to expand choices, to use incentives to achieve the desired result, and

Causes of sprawl

Following are frequently cited causes of sprawl.

FEDERAL

• Investments in the interstate highway system and fuel subsidies when similar levels of investment were not made in rail and transit systems
• Subsidies for local sewer systems that led to vast overbuilding in the 1970s
• Tax deductions for interest and property taxes on single family homes, but not on apartments or other living arrangements
• Dropping most federal subsidies for urban redevelopment.

STATE

• Investments in highways and not nearly as much in transit
• A revenue sharing formula that is based on per capita distribution rather than various measures of need (such as local tax effort)
• Proposal A funding for education that gives more relief to taxpayers in growing areas than to taxpayers in city school districts
• Low interest loans subsidize growth infrastructure and economic development in greenfields
• Land division act that allows many splits without platting and does not prevent the creation of unbuildable lots
• Failing to grant enabling authority to local governments to use contemporary planning and zoning tools to better protect farmland, manage growth, and promote urban redevelopment.

LOCAL

• Lack of coordinated planning and zoning between adjoining units of local government
• Failure to adequately address the public facility and service costs associated with local plans and zoning decisions (especially if buildout is considered)
• Lack of farmland, forestland, and open space preservation programs

CONSUMER CHOICE

• Sprawl offers many benefits to those with the economic means to enjoy them and so consumers frequently choose development options that contribute to sprawl over options that support compact settlement patterns
• Preference surveys and home purchases show a preference of consumers for large rural lots over smaller urban lots, but consumers do not have to pay the true (unsubsidized) costs of rural lots and public services.
• Consumers often have very few higher density, high quality living choices in cities or suburbs because of local zoning practices.

• Large lot rural zoning in which lots are too small to protect farm and forest land or to either discourage rural residential lots or to provide enough tax revenue to pay for all new public service costs
• Over reliance on single-use zoning
• Strip zoning (especially strip commercial development along major roadways)
• Density standards that are too low for efficient utilization of public sewer and water infrastructure (which usually requires four dwelling units/acre for single family and 10 dwelling units/acre for multiple family residential)
• Inadequate supply of properly zoned land for urban density development (reduces the supply of affordable housing) in some cases because of exclusionary zoning.

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to implement 10 smart growth tenets (see sidebar).

To close the chasm between past land use practices and the Council’s vision for smart growth, we must first define the meaning of smart, or quality, growth.

What is smart growth?

Smart growth is a term that has been defined in a variety of ways. The term is not intended to imply that all development over the last decades has been “dumb;” only that as we come to realize the effects of current development patterns, we can begin to develop and apply new techniques that will replace current development regulations with new ones that promote the MLULC vision for sustainable, economically viable, and socially equitable communities.

The American Planning Association defines it as follows:

“Smart Growth means using comprehensive planning to guide, design, develop, revitalize, and build communities for all that:

• have a unique sense of community and place;
• preserve and enhance valuable natural and cultural resources;
• equitably distribute the costs and benefits of development;
• expand the range of transportation, employment and housing choices in a fiscally responsible manner;
• value long-range, regional considerations of sustainability over short term incremental geographically isolated actions; and
• promote public health and healthy communities.

Compact, transit accessible, pedestrian-oriented, mixed-use development patterns and land reuse epitomize the application of the principles of Smart Growth. In contrast to prevalent development practices, Smart Growth refocuses a larger share of regional growth within central cities, urbanized areas, inner suburbs, and areas that are already served by infrastructure. Smart Growth reduces the share of growth that occurs on newly urbanizing land, existing farmlands, and in environmentally sensitive areas. In areas with intense growth pressure, development in newly urbanizing areas should be planned and developed according to Smart Growth principles.” APA Smart Growth Policy 2002 at www.planning.org/policyguides/smartgrowth.htm

As you can see, this definition fits well with the MLULC Vision and the 10 Tenets of smart growth (see sidebar) the MLULC used to guide many of its recommendations. This is a vision that will not be realized if current trends are allowed to continue, and current trends will continue unless local governments consciously choose to change local plans and zoning ordinances to incorporate the smart growth tenets.

smart growth can provide a win–win for everyone.

• Farmers and foresters win by being able to manage their land for maximum return as a resource based industry without conflicts from nonfarm residences; and if Purchase of Develop Rights (PDR) or Transfer of Develop Rights (TDR) are a part of the program, by being able to capture development value without having to convert their land to another use.
• Developers win by being able to get a better return on their investment for properties built at a higher density (where infrastructure is adequate), but with quality design that is compatible with adjacent lands.
• Consumers win because they will have a wider range of housing types and modes of travel available to them.
• Taxpayers win by stretching public investments further through greater efficiency in construction and use of public roads, sewers, water lines, and schools.
• Young families and the elderly win by having a wider range of affordable housing choices available.
• More people will have access to a wider range of transit, biking, and pedestrian travel options.
• Communities will be healthier.

“...as we come to realize the effects of current development patterns, we can begin to develop and apply new techniques…”

Smart growth tenets

The Michigan Land Use Leadership Council used the following smart growth tenets1 for many of the recommendations contained in its final report. There was unanimity of opinion among the leadership council members on these very basic definitions. The challenge today, and the challenge of this series, is to determine how to move from principle to action.

1. Create a range of housing opportunities and choices
2. Create walkable neighborhoods
3. Encourage community and stakeholder collaboration
4. Foster distinctive, attractive communities with a strong sense of place
5. Make development decisions predictable, fair, and cost-effective
6. Mix land uses
7. Preserve open space, farmland, natural beauty, and critical environmental areas
8. Provide a variety of transportation choices
9. Strengthen and direct development towards existing communities
10. Take advantage of compact development design

1 For more detail and examples see www.smartgrowth.org/pdf/gettosg.pdf.
How smart growth can help combat sprawl

Not every smart growth tenet applies in every community, but they all apply across a metropolitan area.

The key to successfully implementing the 10 smart growth tenets is careful planning and persistent implementation. This requires that all the key stakeholders in the community be involved from the beginning. Farmers, realtors, developers, neighborhood groups, bankers, businesspersons, school administrators, and scores of other people must be invited to participate in the preparation of local plans and design of smart growth initiatives. Adjoining units of local government should be consulted, and planning efforts carefully coordinated, not just along the border of the communities. Opportunities to share public service costs, to adopt common zoning standards and meet area wide needs for issues of greater than local concern should be seized upon and nurtured through to implementation. A complete list of smart growth Actions to Combat Sprawl can be found at www.planningmi.org/resources.

Smart growth techniques, more than any previous efforts to provide an organizing set of principles for building quality communities, offer many opportunities for win–win. Local governments must decide whether to continue following 20-year old planning and zoning practices that are now recognized as having a host of negative unintended consequences, or to start down the path to smart growth, which offers a broader array of benefits for not only the present generation, but also future generations.

We must move beyond the excuse that sprawl is what another community is doing, not what my community may be doing. We need to get past acquiescing to sprawl because that is “how we have always done it.” If we care about our children and our grandchildren, they must be provided with more choices than current trends will allow.

The Michigan Land Use Leadership Council has illuminated a path to a better future for Michigan and a vision of vibrant, healthy, and sustainable rural, suburban and urban communities. It is now up to local governments to take the lead and show the rest of the nation how Michigan communities epitomize smart growth.

By Mark A. Wyckoff, FAICP President, Planning & Zoning Center, Inc., Editor, Planning & Zoning News