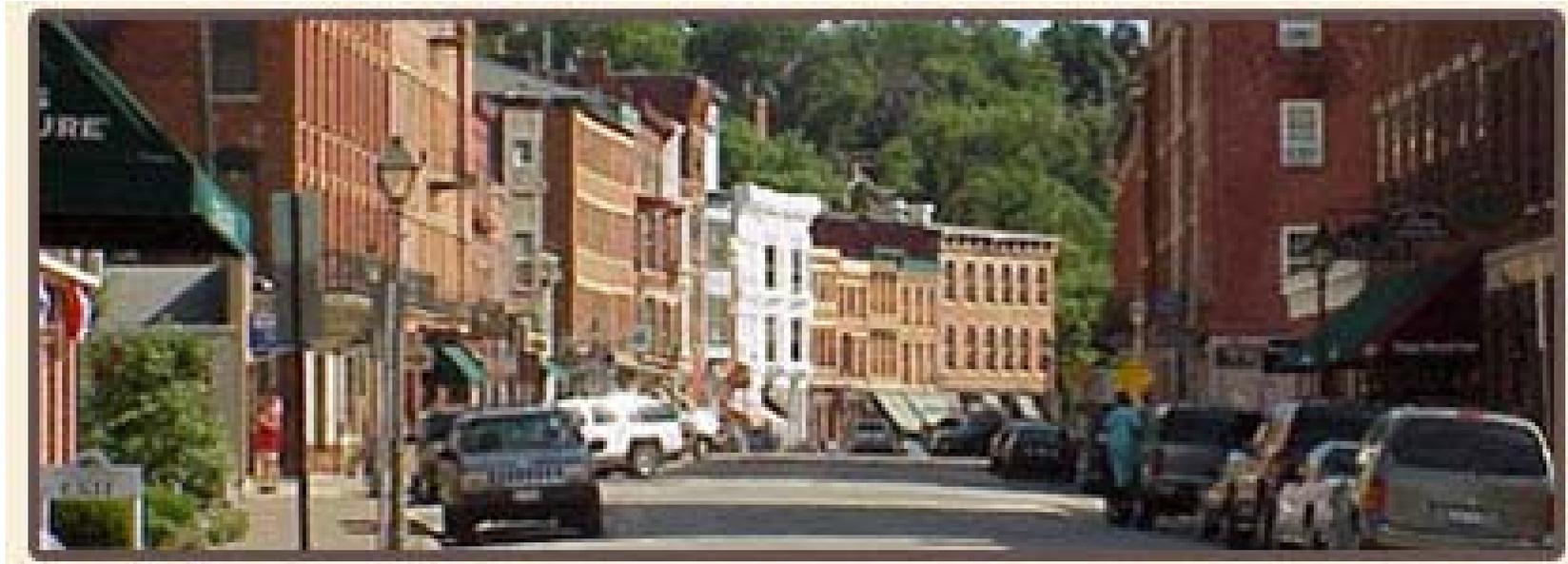


SMART GROWTH AND TRANSPORTATION IN SMALL COMMUNITIES

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Introduction

What is Smart Growth?

Smart growth is a set of planning practices and development principles that result in more efficient land use and transport patterns¹. Smart growth can be best defined by the Ten Principles of Smart Growth²:

1. Mix Land Uses. New, clustered development works best if it includes a mix of stores, jobs and homes. Single-use districts make life less convenient and require more driving.
2. Take Advantage of Existing Community Assets. From local parks to neighborhood schools to transit systems, public investments should focus on getting the most out of what we've already built.
3. Create a Range of Housing Opportunities and Choices. Not everyone wants the same thing. Communities should offer a range of options: houses, condominiums, affordable homes for low income families, and "granny flats" for empty nesters.
4. Foster "Walkable," Close-Knit Neighborhoods. These places offer not just the opportunity to walk—sidewalks are a necessity—but something to walk to, whether it's the corner store, the transit stop or a school. A compact, walkable neighborhood contributes to peoples' sense of community because neighbors get to know each other, not just each other's cars.
5. Promote Distinctive, Attractive Communities with a Strong Sense of Place, Including the Rehabilitation and Use of Historic Buildings. In every community, there are things that make each place special, from train stations to local businesses. These should be protected and celebrated.
6. Preserve Open Space, Farmland, Natural Beauty, and Critical Environmental Areas. People want to stay connected to nature and are willing to take action to protect farms, waterways, ecosystems and wildlife.
7. Strengthen and Encourage Growth in Existing Communities. Before we plow up more forests and farms, we should look for opportunities to grow in already built-up areas.
8. Provide a Variety of Transportation Choices. People can't get out of their cars unless we provide them with another way to get where they're going. More communities need safe and reliable public transportation, sidewalks and bike paths.

¹ Littman, T.A. *Evaluating Criticism of Smart Growth*. Victoria Transport Policy Institute. Victoria, BC, Canada, 2003, p. 5.
<http://www.vtpi.org/sqcritics.pdf>

² *How is Smart Growth Achieved?* Smart Growth America, Washington, DC.
<http://www.smartgrowthamerica.com/sghowto.html>

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9. Make Development Decisions Predictable, Fair, and Cost-Effective. Builders wishing to implement smart growth should face no more obstacles than those contributing to sprawl. In fact, communities may choose to provide incentives for smarter development.
10. Encourage Citizen and Stakeholder Participation in Development Decisions. Plans developed without strong citizen involvement don't have staying power. When people feel left out of important decisions, they won't be there to help out when tough choices have to be made.

Smart growth generally refers to development that for the most part resembles traditional city design. Smart growth stresses the importance of including pedestrians, the most basic and fundamental form of travel, as well as cyclists and transit users in planning new developments and improving and infilling existing developments. It also encourages using compact development with large amounts of public space instead of large lawns. Smart growth also forces everyone to plan *their own* community.

Smart Growth vs. 'Sprawl'

Many current policies of auto-based, low-density, single-use fringe, often unplanned development or "sprawl," which focus on mobility, physical movement, or automobility, movement by automobile. Smart growth focuses on accessibility, which is the ability of people to reach desired goods, services, and activities, and decreases distances between various trip origins and destinations. Sprawl results in longer but faster automobile trips, while smart growth results in shorter, slower trips, some by alternate modes,³ such as walking, cycling, and transit.

The following table shows differences between sprawl and smart growth on various major factors⁴.

Table 1: Smart Growth vs. Sprawl⁵

	Smart Growth	Sprawl
Density	Higher-density, clustered activities.	Lower-density, dispersed activities.

³ Littman, T.A. *Evaluating Criticism of Smart Growth*. Victoria Transport Policy Institute. Victoria, BC, Canada, 2003, p. 5. <http://www.vtpi.org/sqcritics.pdf>

⁴ Littman, T.A. *Evaluating Criticism of Smart Growth*. Victoria Transport Policy Institute. Victoria, BC, Canada, 2003, p. 5. <http://www.vtpi.org/sqcritics.pdf>

⁵ Littman, T.A. *Evaluating Criticism of Smart Growth*. Victoria Transport Policy Institute. Victoria, BC, Canada, 2003, p. 5. <http://www.vtpi.org/sqcritics.pdf>

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Growth pattern	Infill (brownfield) development.	Urban periphery (greenfield) development.
Land use mix	Mixed.	Homogeneous.
Scale	Human scale. Smaller buildings, blocks and roads. Attention to detail, since people experience the landscape up close, as pedestrians.	Large scale. Larger buildings, blocks, wide roads. Less detail since people experience the landscape at a distance, as motorists.
Public services (shops, schools, parks)	Local, distributed, smaller. Accommodates walking access.	Regional, consolidated, larger. Requires automobile access.
Transport	Multi-modal transportation and land use patterns that support walking, cycling and public transit.	Automobile-oriented transportation and land use patterns, poorly suited for walking, cycling, and transit.
Connectivity	Highly connected roads, sidewalks and paths, allowing more direct travel by motorized and nonmotorized modes.	Hierarchical road network with many unconnected roads and walkways, and barriers to nonmotorized travel.
Street design	Streets designed to accommodate a variety of activities. Traffic calming.	Streets designed to maximize motor vehicle traffic volume and speed.
Planning process	Planned and coordinated between jurisdictions and stakeholders.	Unplanned, with little coordination between jurisdictions and stakeholders.
Public space	Emphasis on the public realm (streetscapes, pedestrian areas, public parks, public facilities).	Emphasis on the private realm (yards, shopping malls, gated communities, private clubs.)

Smart Growth in Small Communities

Many states now have, or are in the process of passing planning legislation aimed at encouraging smart growth at the state level. The state legislation includes regulation of many small communities, townships, and counties. Many of these governmental units and their constituents feel that smart growth is an infringement on local control, an unnecessary expense, and not needed because growth and congestion are not viewed as problems in small communities and rural areas. In some

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areas smart growth is even compared to a “blueprint for socialism,⁶” and are comparing the cost to “buying a Cadillac when you could get by with a Chevette.⁷”

Despite the apparent lack of ‘need’ for smart growth, U.S. Census data show that non-metropolitan experienced a net migration from metropolitan counties of just over 500,000 between 1995 and 2000⁸, up nearly ten-fold since the period of 1985 to 1990.

The ten principles of smart growth are universal to all communities, urban and rural, large or small. Small communities and rural areas also feel the effects of current development trends including ‘sprawl’ type and fringe strip commercial development that creates auto dependent travelers and consumes excessive amounts of the natural environment around their communities. This empties downtowns of small communities, leads to increased taxation to support additional infrastructure, and destroys the very values many small town residents deem the most important.

Lastly it is important to remember that “rural planning needs to maintain a system-wide perspective at the local, regional and statewide levels. Many times when local and regional agencies perform planning, there is a natural tendency to focus on projects in the local area that address local concerns and technical needs. Many plans have a tendency to be project lists. Instead, plans should take a long term strategic perspective and reflect local, regional, statewide, and national priorities. How a particular improvement fits into the local, regional and statewide system is a key planning question⁹.”

This paper will seek to define and detail how small communities and their transport systems can benefit from smart growth. This will include discussion of how smart growth affects the following topics:

- Transportation
- Preservation
- Zoning and Land Use
- Education and Funding

⁶ Sink, Lisa. *Repeal of ‘Smart Growth’ Law Sought*. Milwaukee Journal-Sentinel, July 27, 2003

⁷ Derus, Michele. *Does it Work for All?* Milwaukee Journal-Sentinel, September 12, 2003.

⁸ Schachter, J.P., Franklin, R.S., and Perry, M.J. *Migration and Geographic Mobility in Metropolitan and Nonmetropolitan America: 1995 to 2000*. US Census Bureau, Washington, DC, 2003, p. 3. <http://www.census.gov/prod/2003pubs/censr-9.pdf>

⁹ *Planning for Transportation in Rural Areas*. Federal Highway Administration, Washington, DC. <http://wwwwcf.fhwa.dot.gov/planning/rural/planningfortrans/2ourrts.html>

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Transportation

Transportation in rural communities is generally controlled by different levels of governments, including municipal, county, and state governments. Often many rural areas have geographical challenges, including¹⁰:

- Long distances between population centers.
- Steep grades, mountain passes.
- More dramatic weather events and effects on road conditions.
- Dispersed system with high unit costs for service delivery, operations, and maintenance.

The Federal Highway Administration (FHWA) has compiled a list of challenges facing rural areas. Many of these challenges are unique to rural areas while some are not. The following table lists several challenges and findings faced by rural areas:

Table 2: Federal Highway Administration's Transportation Challenges Facing Rural Areas¹¹

Challenge	Findings
Making Plans Multimodal	<ul style="list-style-type: none"> • Planning for different modes of transportation may be fragmented. • Rural transit plans appear to be mainly focused on keeping the existing system operational. • Efforts to develop multimodal and intermodal plans are hampered by a variety of factors, including the lack of funding flexibility, the lack of a need to coordinate the plans, and the fact that different modes have different sponsors.
Planning and Prioritization	<ul style="list-style-type: none"> • In many instances, the plan is the program. • The process for generating projects at the local and regional levels may be different depending on whether the project is eligible for Federal aid or not. • Much of rural planning involves extensive coordination with local officials, agencies, and other stakeholders.

¹⁰ *Planning for Transportation in Rural Areas*. Federal Highway Administration, Washington, DC. <http://wwwcf.fhwa.dot.gov/planning/rural/planningfortrans/2ourrts.html>

¹¹ *Planning for Transportation in Rural Areas*. Federal Highway Administration, Washington, DC. <http://wwwcf.fhwa.dot.gov/planning/rural/planningfortrans/2ourrts.html>

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Challenge	Findings
Funding the Rural Transportation System	<ul style="list-style-type: none"> • States' funding and maintenance responsibilities vary widely. • States vary in how the non-federal match is provided. • Most states share their Federal aid with local governments. • Some states using a regional approach suballocate some or all of their funds to the regions and then allow each region to actually select their own projects.
Coordinating Transportation Plans and Programs	<p>Successful rural transportation planning processes:</p> <ul style="list-style-type: none"> • Establish a periodic process of meeting with planning counterparts to exchange information. • Using each plan as input into the development of other plans. • Develop a shared and consistent data collection and analysis strategy. • Develop a common set of assumptions for socioeconomic and demographic forecasts. • Establish common measurement and evaluation criteria for system and project selection.
Coordination with Economic Development	<p>Typically, economic development affects rural transportation planning in two ways:</p> <ul style="list-style-type: none"> • Efforts to upgrade interregional highways (usually four lane divided highways or freeways) with the hope that they will induce business to relocate. • Efforts to accommodate a specific new plan proposal.
Land Use Coordination	<p>The main land use trends facing rural areas that planning is addressing can be grouped into three categories:</p> <ul style="list-style-type: none"> • Those rural areas that are experiencing urban spillover. • Those areas that are not experiencing growth and are interested in economic development issues. • Accommodating travel demands of new development.
Regional Planning	<ul style="list-style-type: none"> • States that use Regional Planning Organizations(RPOs) are generally satisfied with them. • RPOs can be an effective mechanism for coordinating with Metropolitan Planning Organization

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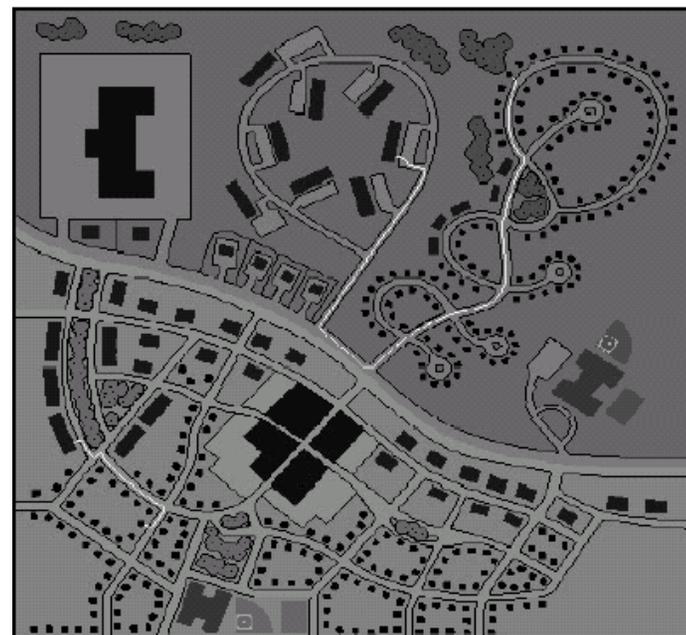
Challenge	Findings
	<p>(MPO) and statewide planning processes and plans.</p> <ul style="list-style-type: none"> • For states that have instituted a regional approach to developing their transportation plans, the key element is what portion of the overall planning process is conducted regionally and what portion centrally. • Some states may use a regional approach but focus mainly on individual counties rather than regions (several counties). • Where RPOs are engaged in transportation planning, the staffing may be relatively independent from the state DOT, or may operate under contract to the state DOT. • The role of an RPO may also vary. Some are advisory while others have control over some of the transportation funds. • At the regional level, each agency may have different geographic boundaries.

Many small communities experiencing growth must deal effectively and fairly with transportation issues. Transportation plans should adhere to the principles of smart growth. Transportation issues that should be included include the layout of streets, street design, pedestrian and cycling facilities, access management, transit and ridesharing, and intercity travel.

Street Connectivity

Up until the 1940s many streets were designed with sidewalks, were relatively narrow, and were well connected, usually by a grid layout. This was abandoned in favor of a more conventional automobile friendly design which featured barriers to travel to prevent through traffic. This design proved to be barrier to all traffic including pedestrians, forcing travelers to drive for almost all trips. Moreover because of the barriers, automobile traffic is concentrated on wide, high speed, multilane arterials that provide further disincentives and barriers to pedestrians.

The differences of the two designs can be seen in the picture below. In both cases the destinations are the same distance apart. However the bottom shows traditional grid design and the white line shows a short trip from home to an office which can be made easily by



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walking. However, the trip on the top is very long by the barriers created by the conventional design, which creates a dependency on auto use and increases the total distance traveled.

There are many benefits to using grid patterns including the following¹²:

- Reduced arterial traffic volumes with more trips internal to neighborhood
- Less need for ever-wider arterial streets
- Reduced traffic with higher level of walking and bicycling
- Lower speeds with reduced accident severity
- Lower vehicle miles of travel

The following design standards are recommended to create a grid system that provides for a walkable neighborhood and reduces automobile trips¹³:

- Grid or modified grid pattern
- Vehicle connections every 300 to 1,000 feet
- Pedestrian connections every 200 to 500 feet
- Small block sizes (200x400 ft.)
- Reduced or non-existent hierarchy of internal streets
- Narrower streets
- Alleys
- Pedestrian amenities
- Lower design speeds
- More connections to arterial streets
- Transportation System Management and access management



¹² Fehr & Peers Associates, Inc. *Traditional Neighborhoods: Street Design and Connectivity*. Congress for the New Urbanism, San Francisco, p. 12. http://www.cnu.org/cnu_reports/daisa.pdf

¹³ Fehr & Peers Associates, Inc. *Traditional Neighborhoods: Street Design and Connectivity*. Congress for the New Urbanism, San Francisco, p. 9. http://www.cnu.org/cnu_reports/daisa.pdf

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Street Layout

In addition to the layout of the street network, how the streets are laid out is important as well. In a smart growth, pedestrian friendly community, it is important to consider how pedestrians interact with automobiles and even truck traffic. This can be achieved by using traffic calming and controls. Bypass construction should be considered a last resort rather than an easy out because of the reduction in the attractiveness of having a compact community and road widening destroys adjacent buildings and properties.

Traffic calming is defined as operational measures such as enhanced police enforcement, speed displays, and a community speed watch program, as well as such physical measures as edgelines, chokers, chicanes, traffic circles (pictured at right), speed humps, and raised crosswalks¹⁴. These measures reduce 85th percentile speeds (typical measure) as much as twenty percent on average for speed humps¹⁵, and reduce traffic volumes, often dramatically, by diverting through traffic. This makes streets safer and more attractive to neighborhood pedestrians and cyclists.



Traffic control affects the attractiveness of cycling and walking. This includes typical traffic controls of traffic signals and stop signs, but could include other methods such as modern roundabouts. These provide points where pedestrians can cross busy, high truck volume streets and highways safely. These should be especially used in areas around the central business district and schools, where pedestrians are the most prevalent.

Pedestrian and Bicycle Facilities

¹⁴ *What is Traffic Calming?* TrafficCalming.org. <http://www.trafficcalming.org>

¹⁵ *Traffic Calming: State of the Practice*. Institute of Transportation Engineers/Federal Highway Administration, Washington, DC, August 1999, p. 103. <http://www.ite.org/traffic/tcsop/Chapter5a.pdf>

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In many new developments, traffic is only thought of in terms of accommodating automobiles. Pedestrians and cyclists are rarely provided separate facilities. However, many communities are passing ordinances forcing developers to include sidewalks in any new residential development. Furthermore, many communities are building bicycle paths or converting abandoned railroad right-of-way into paths in addition to bicycle lanes (seen above) along city streets.

In the future, many communities could benefit from right-of-way acquisition along rural roads to add future paths or sidewalks in high pressure development areas. Many high volume rural highways have paved shoulders, which could be striped and signed to signify a bicycle lane. These facilities of paths and lanes can be used as alternatives to driving for some intercity trips.

Access Management

Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway¹⁶. Access management not only increases safety, reduces traffic, and extends the life of roadways, it can increase local land values, preserve the environment, and reduce emissions. The increased safety is from the reduction of conflict points, where vehicles' paths cross or users of different modes cross. The increased safety encourages transit use, and creates a more positive environment for cyclists and pedestrians.

Access management can be accomplished through the following basic methods¹⁷:

- Policies, directives, and guidelines: recommended by agencies, but lack mandatory status and enforceability of regulations.
- Access management regulations: are used in codes or local ordinances and are enforceable.
- Acquisition of access rights: purchasing management rights is a costly, but long-lasting solution.
- Land development regulations: include the size of lots and type of use and are enforced usually by local agencies.
- Development review and impact assessment: while developments are under review, changes can be made.
- Geometric Design: many upgrades and safety improvements can be found in design manuals.

Transit, Paratransit, Ridesharing, and Intercity Travel

In rural areas, public transit services are provided primarily to transit dependent groups such as the elderly, school children, and disabled. However, there are some general public access services in rural areas across America. Public transit includes buses, commuter rail, demand response services (usually vans), light rail, and vanpools. This service is primarily local in

¹⁶ *Access Management Manual*. Transportation Research Board, Washington, DC, 2003, p. 3.

¹⁷ *Access Management Manual*. Transportation Research Board, Washington, DC, 2003, p. 6.

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nature and, largely, is not connected to the nation's passenger service network. In 1998, some 1,600 local agencies provided rural and public transportation services using 10,000 vehicles, mostly buses or vans. However, some 38 percent of the nation's rural residents live in areas without any public transportation, and less than 10 percent of federal spending for public transportation goes to rural communities¹⁸.

Wherever possible, fixed funding should be secured to ensure publicly subsidized transit or paratransit service for non-automobile users because life for those individuals without the necessary transportation to join in everyday activities such as working, shopping, or socializing is severely degraded at best. This is not an issue for sectors of the population that may take their mobility for granted. Some may assume that everyone has the same capability to participate in our system as they do¹⁹.

This should include regional or countywide service since destinations are in many different nearby communities. This is true of the Ozaukee County Shared-Ride Taxi in Wisconsin. Run by the county, it provides door to door service within the county to all citizens, with discounts to seniors, students, and the disabled. It is also linked to transit bus routes that link Ozaukee County to its neighbor to the south, Milwaukee County. It is funded through programs with the federal government with additional funds provided by Ozaukee County.



Private ridesharing (vehicles with two or more vehicles), vanpooling and carpooling, is generally overlooked in many communities. In many states, counties, and communities, systems are created whereby people can coordinate ridesharing through a phone number or website. In addition, many private rural and small community employers and farms vanpool poor workers. These provide access, either through governmental or private association, to those without automobiles. Drivers from different households that choose to rideshare, reducing the number of single occupant vehicles (SOVs), traffic, and emissions, should be encouraged to do so when possible because many that choose to rideshare are from the same household.

¹⁸ *Planning for Transportation in Rural Areas*. Federal Highway Administration, Washington, DC.

<http://wwwcf.fhwa.dot.gov/planning/rural/planningfortrans/2ourrts.html>

¹⁹ Hough, J. *Mobility Issue for Disadvantaged Citizens Addressed*. Small Urban and Rural Transit Center, Fargo, ND, February, 2003. <http://www.surtc.org/newsletter/2003Feb/pg9.php>

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Intercity travel is particularly important in small areas because many destinations are located in different communities that are several or more miles apart. However, little attention is paid to providing alternatives to automobile use. Since 1965, the number of communities with daily bus service dropped from 23,000 to 4,500²⁰. In addition, only 180 rural communities are served by Amtrak passenger rail service. Some communities are also served by air service, but it can be expensive. Efforts should be made to coordinate transit and longer travel alternatives for rural communities such as private bus service and connecting these alternatives together with air, rail, and other nationwide networks.

Preservation

Many rural areas that attract vacationers or homeowners seeking a natural setting or small-town atmosphere become the victims of their own success²¹. Many residents in small communities like the feel of small-town life including compact walkable communities with mixed development and lively central areas that relatively adhere to smart growth.

Current growth patterns threaten the very identity of small rural communities by emptying downtowns due to the spreading of growth to strip commercial development, and ever expanding residential development, leading to the destruction of surrounding environments. This section deals with the additional effects current development trends have on the environment, farming, and historical and cultural landmarks compared to smart growth.



²⁰ *Planning for Transportation in Rural Areas*. Federal Highway Administration, Washington, DC.

<http://wwwcf.fhwa.dot.gov/planning/rural/planningfortrans/2ourrts.html>

²¹ Wells, B. *Smart Growth at the Frontier: Strategies and Resources for Rural Communities*. Northeast-Midwest Institute, Washington, DC, 2002, p. 4. <http://www.nemw.org/RuralSmartGrowth.pdf>

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Historical/Cultural Preservation

Many rural communities have many historical or culturally significant homes, businesses, parks, open space, and interesting architecture from different periods and reflect past ideals (such as the Swiss style above). These are often replaced or abandoned in favor of plain, repetitive sprawl type housing and big box retail developments.

Redevelopment of existing buildings should be encouraged through codes or tax incentives, rather than demolition. Road widening should be strongly discouraged in historic districts. Infill in historic neighborhoods should fit with existing developments.

Since the 1970s, mounting evidence has shown that historic preservation can be a powerful community and economic development strategy. Evidence includes statistics compiled from annual surveys conducted by the National Trust for Historic Preservation and statewide Main Street programs, state-level tourism and economic impact studies, and studies that have analyzed the impact of specific actions such as historic designation, tax credits, and revolving loan funds. Among the findings²²:

- Creation of local historic districts stabilizes, and often increases residential and commercial property values.
- Increases in property values in historic districts are typically greater than increases in the community at large.
- Historic building rehabilitation, which is more labor intensive and requires greater specialization and higher skills levels, creates more jobs and results in more local business than does new construction.
- Heritage tourism provides substantial economic benefits. Tourists drawn by a community's (or region's) historic character typically stay longer and spend more during their visit than other tourists.
- Historic rehabilitation encourages additional neighborhood investment and produces a high return for municipal dollars spent.
- Use of a city or town's existing, historic building stock can support growth management policies by increasing the availability of centrally located housing

In addition to saving historical buildings, thousands of communities have enacted design standards to improve the appearance of commercial development. Cathedral City, California; Evanston, Wyoming; and Cape Cod, Massachusetts, are just a few of the local jurisdictions that have used design standards to improve the character of big-box stores²³. These include limiting the size and appearance of development, allowing local governments to control how these stores affect the community.

²² Facca, A. *An Introduction to Preservation Planning*. <http://www.plannersweb.com/wfiles/w191.html>

²³ Beumont, C. and Tucker, L. *Big Box Sprawl and How to Control It*. Municipal Lawyer Magazine, Washington, DC, April 2002, p. 8. http://www.nationaltrust.org/issues/smartgrowth/big_box_sprawl.pdf

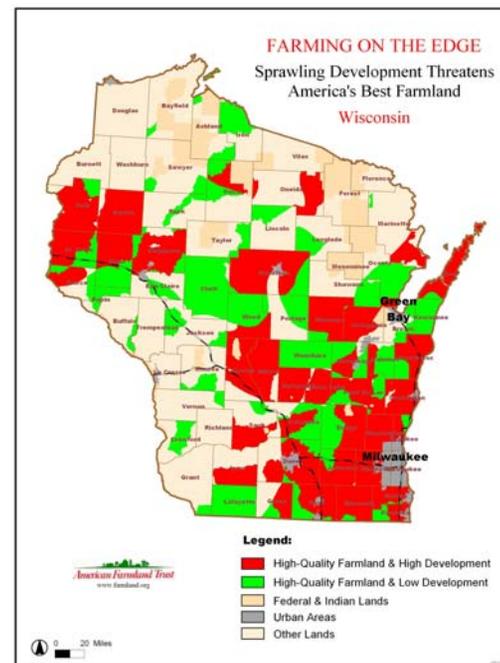
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Agricultural Preservation

In many small communities, agriculture is a way of life. It is what many local economies depend on. However, in sprawling development, too much agricultural land is being consumed. From 1992 to 1997 more than 11 million acres of rural land were converted to developed use—and more than of that conversion was agricultural land²⁴. Agricultural land is desirable for building because it tends to be flat, well drained and generally is more affordable to developers than to farmers and ranchers. Far more farmland is being converted than is necessary to provide housing for a growing population. Over the past 20 years, the acreage per person for new housing almost doubled. Most of this land is outside of existing urban areas. Since 1994, lots of 10 to 22 acres accounted for 55 percent of the growth in housing area²⁵.

One innovative program for agricultural protection is the Rural Legacy Program, enacted by the Maryland General Assembly in 1997. The program encourages local governments and private land trusts to identify Rural Legacy Areas and to competitively apply for funds to complement existing land preservation efforts or to develop new ones²⁶. Maryland's program allows for the protection of important lands and allows for such innovative techniques to protect agricultural land through transfer of development rights or conservation easements.

Well-managed agricultural land supplies important non-market goods and services. Farm and ranch lands provide food and cover for wildlife, help control flooding, protect wetlands and watersheds, and maintain air quality. They can absorb and filter wastewater and provide groundwater recharge²⁷.



²⁴ *Why Save Farmland?* American Farmland Trust, Washington, DC, January, 2003, p. 1. <http://www.farmlandinfo.org/fic/tas/Why%20Save%20Farmland%201-03.pdf>

²⁵ *Why Save Farmland?* American Farmland Trust, Washington, DC, January, 2003, p. 1. <http://www.farmlandinfo.org/fic/tas/Why%20Save%20Farmland%201-03.pdf>

²⁶ *Maryland's Rural Legacy: Introduction.* Annapolis, MD. <http://www.dnr.state.md.us/rurallegacy/rlprogram/introduction.html>

²⁷ *Why Save Farmland?* American Farmland Trust, Washington, DC, January, 2003, p. 2. <http://www.farmlandinfo.org/fic/tas/Why%20Save%20Farmland%201-03.pdf>

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Environmental Preservation

Since passage of major environmental legislation beginning in the 1960s, many environmental areas have been protected through federal and state enforcement. However despite these protections, development continues to destroy many critical habitats including wetlands, prairies, and woodlands (often called greenfields). Development also poses grave risks to many threatened or endangered species, increases water and air pollution, and threatens biodiversity. Smart growth reduces the effects of growth on greenfields surrounding small communities, stresses the cleaning up and redevelopments of brownfields, abandoned industrial sites with polluted soils, and reduces the effect on the wildlife and plants around communities.

Excessive low density development creates additional impervious surfaces in the form of parking lots, wider streets, driveways, and roofs. This leads to greater contamination of waterways due to runoff of salts, oil, and heavy metals. Also, increased imperviousness increases the likelihood and intensity of flooding or streams and rivers. Since current developments increase driving distances, total air pollution increases. In addition, increased dispersed development leads to increased use of septic systems that pollute groundwater faster than centralized systems.

Wetlands benefit people and the natural world in remarkable ways. They provide critical habitat for wildlife, water storage to prevent flooding and protect water quality, and recreational opportunities for wildlife watchers, anglers, hunters, and boaters²⁸. Wetlands are among the most biologically diverse habitats. Despite having extensive federal and state protection, development was responsible for 49 percent of the wetland loss from 1992 to 1997²⁹. Woodlands and prairies have relatively high demand because of their beauty, ease to develop, and residential development value. Many woodland areas are home to a variety of animals. Prairies are all but lost in many areas because their rich soils are good for agriculture, but small amounts still are unaltered. Both are biologically diverse. Planning should include protection of these important habitats.



²⁸ *Wisconsin Wetlands: Wetland Functional Values*. Wisconsin Department of Natural Resources, Madison, WI, 2003.

<http://www.dnr.state.wi.us/org/water/fhp/wetlands/function.shtml>

²⁹ *Why Save Farmland?* American Farmland Trust, Washington, DC, January, 2003, p. 2.

<http://www.farmlandinfo.org/fic/tas/Why%20Save%20Farmland%201-03.pdf>

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Due to the loss of wetland, woodland, and prairie habitats, many species are affected from decreased birth rates, to increased roadkills, reducing the number of animals and species in an area.

One way to reduce the effects of development is the conservation subdivision. Conservation subdivisions (shown in the illustration at above) build housing and streets around existing natural features and have small lots so that large tracts of land are held in common or conserved as open space. This decreases conflicts with critical environments, increases open space, and reduces land consumption.

Land Use and Zoning

Zoning is one of the most important aspects of smart growth. In many communities everything from building specifications to roadway widths, from the number of parking spaces to the sizes of lots are contained within zoning ordinances. Many local zoning ordinances are either directly or indirectly responsible for the sprawl-type development. It is important for communities to develop smart growth zoning to codify aspects of the ten principles into practice. Furthermore, it is usually required as part of a comprehensive plan.

Often code administration is an often-overlooked area that can play a critical role in determining the success of implementing smart growth projects. Many good projects have been delayed, chased away, or killed off due to a burdensome review process. Application fees, review periods, environmental analysis, process steps, service fees and hearings should all be designed to help good projects gain easy, quick approval at a reduced cost to the developer³⁰. Therefore, it is important to remember that zoning codes must be easy to understand and follow. Many developers can become confused so it is important to remember the following³¹:

- Use straightforward language and terms that are unambiguously defined and used consistently.
- Provide simple explanations that avoid unnecessary complexity. Try to keep each section of the code self-contained and avoid confusing cross references, exceptions, and footnotes.
- Use tables or graphics to communicate zoning criteria and development standards, and avoid lengthy and repetitive text. List setbacks for different zones and building types in tables rather than repeating the same phrase over and over with different numbers

³⁰ *Overcoming Obstacles to Smart Growth through Code Reform An Executive Summary of Smart Growth Zoning Codes: A Resource Guide*. Local Government Commission, Sacramento, CA, 2003, p. 6.

http://www.lgc.org/freepub/PDF/Land_Use/sg_code_exec_summary.pdf

³¹ *Getting to Smart Growth II: 100 More Policies for Implementation*. Smart Growth Network. Washington, DC, p. 85.

<http://www.smartgrowth.org/pdf/gettosg2.pdf>

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Encouraging Mixed Land Use and Commercial Development

Many current zoning ordinances adopted by communities require that all land uses be separated onto separate zones, often called use-based zoning. This separates residential areas from retail shopping, office space, restaurants, and other commercial and industrial zones. Zoning often separates entire areas of communities by forcing commercial and industrial areas to strip fringe areas or industrial parks far from residential areas. This separation focuses on keeping ‘incompatible’ land uses apart. However, it forces many travelers to drive to perform simple everyday tasks such as trips to work, restaurants, and shopping.

A community can adopt a more flexible zoning system, or form-based zoning, (seen in the picture at right) that allows commercial and residential space to occupy the same building or areas. Commercial uses are then located on the lower floors facing streets while residential space occupies the floors above. This will increase the compactness of a neighborhood while placing commercial uses close to customers, making walking attractive and even the desired form of transport.

Attention should also be paid to bringing and keeping civic institutions such as schools, village halls, post offices, and businesses such as banks and retail stores in the central business district of small communities to draw customers downtown. Tactics such as tax incentives, business improvement districts (BIDs) and other infill programs keep or attract businesses downtown rather than slowly draining the central community to fringe areas of strip development, occurring in many areas.



Fortunately, this draining trend may be reversing. In many places, stores are housed in cookie-cutter regional malls surrounded by surface parking or can be found in strip malls that appear at regular intervals along busy arterials. Increasingly, these developments are failing... While shopping continues to be a great American pastime, people are looking for new, more attractive places to shop. In response, retailers have been locating stores on older main streets and in “lifestyle centers”—open-air shopping malls that are located in town centers. Today’s attractive and successful retailing centers pay careful

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attention to the pedestrian experience. They also capitalize on interesting architectural design to attract both retail tenants and surrounding office and residential development³².

Building Setbacks and Parking Requirements in Commercial Areas

Many communities encourage the use of large setbacks with ample parking space be provided, usually in front of businesses. This discourages walking by increasing trip lengths and increasing conflicts with automobiles. By reducing or eliminating these setbacks, walking becomes more attractive and it increases a sense of place among pedestrians.

In small communities, public and private parking is essential and should be located either as street parking, parallel or angle, in front of businesses or in lots nearby or with alley access behind businesses. This creates an area of concentrated activity along a street corridor or area, surrounding by parking rather than divided by it. Parking is essential for businesses, but the location should be chosen to facilitate the use of all forms of transport, especially walking, to combine many trips into one automobile trip.

Residential Development

Many current policies favor large single-family detached homes, on large lots, on wide streets. These often include only developing one type of housing, single-family, rather than a mix of all types including two- and multi-family units. This is often favored by the zoning regulations that intentionally discourage dense multi-family developments that may be needed to suit the future needs of a community's residents. This is often fueled by the belief that dense development leads to traffic congestion and other socio-economic problems that plague dense, urban neighborhoods. While dense development does fuel more automobile trips, they are generally shorter leading to and overall decrease in driving. In addition, dense development encourages walking and cycling and uses less space per dwelling unit, which reduces land consumption, and provides a range of housing costs for a variety of income levels. Furthermore, there is no convincing link between density and crime, poverty, and other socio-economic problems.

Lot sizes in small communities are set up by using a minimum lot size to prevent dense development, often as large as two to five acres, which absorbs even more space and environment increasing driving and infrastructure costs. Since houses on two acre lots are far apart, walking is impractical and leads to more frequent and longer automobile trips which increase

³² *Getting to Smart Growth II: 100 More Policies for Implementation*. Smart Growth Network. Washington, DC, p. 48.
<http://www.smartgrowth.org/pdf/gettosg2.pdf>

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congestion and require widening of roads. Furthermore, additional infrastructure must be built to accommodate growth that is far apart including longer new roads and sewer extensions.

Wide streets are built to accommodate extremely unlikely events such as two fire engines passing, which reduce money and space available for sidewalks and increases automobile speeds. Many residential streets are built as wide as forty feet, absorbing much of the standard 60 to 66 feet of right-of-way. In addition, developers are forced to pay for additional roadway and are less inclined to provide walking and cycling access such as sidewalks and bike lanes. Widths should be built to be reasonable, such as the traditional standard of 30 to 33 feet.

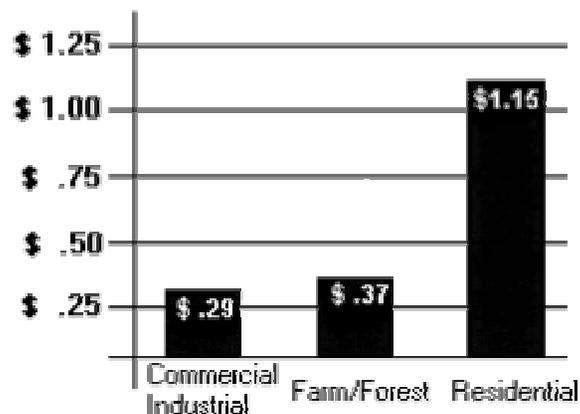
With all the current and future costs involved in residential development, many communities are performing fiscal impact studies. These studies generally show that residential development is a net fiscal loss for communities and recommend commercial and industrial development as a strategy to balance local budgets. Rural towns and counties that are likely to benefit most from the information provided by fiscal impact analyses rarely have the expertise or resources to conduct a study, which tends to be expensive. Also, these studies rarely consider the fiscal contribution of farm, forest and recreational lands, which are very important to rural economies³³.

The following graphic shows that residential development is the most expensive land use in terms of providing public services. This is not meant to discourage growth, but it should be considered when decisions are made by local officials to approve development.

³³ *Cost of Community Services Studies*. Farmland Information Center, Washington, DC, 2000.
<http://www.farmlandinfo.org/fic/tas/tafs-cocs.html>

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Table 3: Median cost per dollar of revenue raised to provide public services to different land uses³⁴



Education and Funding

Many of the problems associated with smart growth stem from a lack of understanding. Educating local officials and citizens is imperative for smart growth to succeed. Also state and federal funding is often critical to starting planning at the local level, especially in low budget small rural communities.

Education

Without adequate knowledge of the purpose and benefits of doing a smart growth comprehensive plan, many small community leaders and citizens react with resentment and frustration. Many states, such as Maryland, New Jersey, Oregon, Colorado, Florida, Tennessee, and Wisconsin, as well as cities such as Portland, Oregon, and Toronto, Ontario, other organizations such as the Smart Growth Network, Smart Growth America, and the Congress for the New Urbanism, universities, and government agencies worldwide provide exceptional resources through detailed publications, workshops, updated news, case studies, and guidebooks.

³⁴ *Cost of Community Services Studies*. Farmland Information Center, Washington, DC, 2000. <http://www.farmlandinfo.org/fic/tas/tafs-cocs.html>

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There are many ways to conduct the process of planning. One example is the following when performing the comprehensive planning process with visioning³⁵:

1. Plan for Planning
2. Data Collection and Analysis
3. Issue Identification
4. Visioning (defining future wants of the community)
5. Strategy Formulation
6. Select Preferred Alternatives
7. Draft Plan
8. Plan Review and Approval
9. Plan Implementation
10. Monitor, Reassess, and Amendment Procedure

Funding

Many forms of funding, mostly grants, exist from state and federal sources to assist local communities. In various states, these include different kinds of grants such as preservation/park, transit, transportation, bicycle and pedestrian, and general planning grants all of which can be applied to different aspects of a comprehensive plan. The US Department of Transportation also offers grants through various highway, cycling, and transit programs. Since community-wide planning for small communities can cost well in excess of \$20,000, it is important for state to provide aid to small communities whose annual budgets are less than \$250,000.

States often spend large sums of money on planning in hopes that the resulting savings will occur in reduced pollution, energy use, traffic congestion, etc. For example from 1999 to 2002, the State of Wisconsin spent \$9.5 million on planning and plans to spend an additional \$3 million in 2003.

Conclusion

Smart Growth is *not* 'no' growth. The reasoning behind smart growth is to balance transportation and land use in favor of *all* modes of transport, housing, and development that favors *all* citizens, of *all* age groups, income levels, or races.

³⁵ Haines, A. *Using Visioning in the Comprehensive Planning Process*. UW-Extension, Madison, WI, 2001.
http://www.dnr.state.wi.us/org/es/science/landuse/data_wkshp/vision.pdf

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Conventional codes, road design, and land use favor the exclusive use of the automobile for all trips, excluding those who do not drive from many basic trips.

It is also felt that smart growth laws reduce local control. However, smart growth forces local governments *to take* control of their own future rather than taking a passive stance on growth. It forces small communities to perform detailed analysis and plan for their future development.

Unfortunately, smart growth may reduce certain freedoms, but increase others. For example, Smart Growth may increase restrictions on large-lot, urban fringe development but reduce restrictions on building type (multi-family development, secondary suites and home offices) and land use mix (commercial activities within residential neighborhoods)... Smart Growth tends to increase overall freedom in a community by increasing transport and housing options, and the range of solutions available to address transport and land use conflicts. For example, Smart Growth parking management expands the range of responses to parking conflicts, so communities are no longer forced to accept reduced financial freedom for the sake of improving motorists' freedom to enjoy convenient parking³⁶.

It is also very important that small communities and other rural areas don't become victims of their own success by allowing virtually unlimited development, destroying the qualities that made them attractive in the first place as happens in many inner suburbs in metropolitan areas. Smart growth encourages and fosters the small-town structure of close-knit, pedestrian friendly towns, with bustling town centers. Smart growth discourages ever expanding towns with excessive driving, emptying downtowns, and increased taxes to pay for additional infrastructure.

³⁶ Littman, T.A. *Evaluating Criticisms of Smart Growth*. Victoria Transportation Policy Institute, Victoria, BC, 2003, p. 23.
<http://www.vtpi.org/sqcritics.pdf>

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