

Smart Growth and Conservation of Open Space:

Private Markets, Public Responsibilities

Introduction

Smart growth, conservation easements and suburban sprawl. These three phrases comprise a body of ongoing local and regional land use debate in communities across the United States. What should America's rural, suburban and urban communities look like? How should local governments manage new residential, commercial and industrial growth? How can policymakers balance land development pressures with the management and preservation of natural resources? Over the past thirty years, as concerns over climate change, food production and access to open space have increased, individuals and organizations have raised these questions with an increasing sense of urgency.

Fueled by unprecedented economic prosperity, government incentives for home ownership and the rise in automobile use, America's post-World War II suburbs emphasized detached, single-family homes on large lots with a segregation of land uses. Large lots and segregated land uses essentially required reliance on personal vehicles, which in turn lead to America's current dominant development patterns. While greater numbers of the population became new homeowners and escaped busy or undesirable cities, the rapid suburbanization of America prompted many negative unintended consequences. Consequently, city planning and public policy researchers began to evaluate the impacts of post-war suburban development patterns in the United States.

Critics label the segregated, large single-family lots far from existing infrastructure suburban sprawl, arguing that it represents poorly planned development, limited green space, increased traffic congestion, crowded schools and unnecessary tax increases on new public infrastructure. In contrast, smart growth is promoted an approach to mitigate the effects of traditional land development. These techniques focus on creating higher-density residential areas, channeling growth into existing areas, providing public transportation options, and preserving existing farmland and open space.

Communities have responded to suburban sprawl over the years with a range of different solutions. The state of Oregon, for example, passed a law in 1973 requiring all



localities to adopt comprehensive plans conforming to 19 goals covering housing, transportation, public facilities and the institution of urban growth boundaries. In contrast, during the same era, Houston, Texas consistently emphasized the primacy of free-market principles, and did not develop even basic zoning regulations throughout the city. These two contrasting examples indicate the range of approaches taken to address suburban development patterns.

Contemporary suburban growth patterns continue to require additional land resources. As Douglas Porter of the Urban Land Institute has noted, there is "a gap between the daily mode of living desired by most Americans and the mode that most city planners believe is most appropriate. Americans generally want a house on a large lot and three cars in every garage ... that dream translates into low-density sprawl and dependence on roads and highways."¹

The following statistics support Porter's critiques of suburban sprawl:

- In 1950, seventy million Americans lived in the nation's most urbanized areas, which covered 13,000 square miles. By 1990, this population had more than doubled, yet the area occupied nearly quintupled, to more than 60,000 square miles.²

¹ Porter, Douglas. "Regional Governance of Metropolitan Form: The Missing Link in Relating Land Use and Transportation" 1991

² Mitchell, John G. "Urban Sprawl: The American Dream." National Geographic July 2001.

Smart Growth and Conservation of Open Space:

Private Markets, Public Responsibilities

- In the United States, development claims farmland at the rate of 1.2 million acres per year. Including forest and other undeveloped land, development claims more than two million acres per year.³
- In 2005, there were 4.2 billion hours of travel delay, 2.9 billion gallons of fuel consumed, and a net urban congestion cost of nearly \$80 billion (Research and Innovative Technology Administration).⁴
- Between 1982 and 2007 40 million acres of land were newly developed bringing the most recently calculated total to 111 million acres. This indicates a 56% increase in development rate, meaning that a third of all land developed in the contiguous United States has been developed in the past 25 years.⁵

History of the Smart Growth Movement

The first wave of smart growth-oriented policies began at the state level during the 1970s and led to significant controversies and uneven implementation. These policies, implemented in California, Florida, Hawaii and Oregon, focused predominantly on the protection and regulation of environmentally sensitive areas. In Hawaii, conservationists decried piecemeal additions to the state's urban zone, which permitted higher density development, while housing advocates blamed managed growth for rising housing prices. In Florida, several localities ignored a state mandate to incorporate smart growth tools into their comprehensive plans. California and Florida's state mandates did not provide any regulatory mechanisms to oversee the implementation of coastal land management plans and were applied either inconsistently or not at all.

Between 1985 and 1990, a second wave of state growth management strategies was adopted in eight states, including New Jersey, Maine, Maryland and Washington. These second-generation efforts took a much broader approach, addressing infrastructure, housing, economic development, community character and quality of life.

In the 1990s, two major smart growth initiatives were undertaken. The first, spearheaded by the American Planning Association (APA), the United States Department

3 Ibid.

4 Transportation Vision for 2030. Rep. U.S. Department of Transportation Research and Innovative Technology Administration, 2008.

5 2007 Natural Resources Inventory Summary, P.7

Components of Smart Growth Policies

- * Creation of a range of housing opportunities and choices
- * Creation of walkable neighborhoods
- * Encouragement of community collaboration
- * Fostering distinctive places with a strong sense of place
- * Mixture of land uses
- * Preservation of open space, farmland, and sensitive areas
- * Provision of a variety of transportation choices
- * Development opportunities within existing communities

Six Principles for Better Development

As Identified by the Valley Conservation Council's
Better Models for Development in the Shenandoah Valley 2010

1. Conserve Natural and Scenic Assets
2. Conserve As You Grow
3. Build Livable Communities
4. Preserve Historic Resources
5. Respect Local Character in New Construction
6. Reduce the Impact of the Car

of Housing and Urban Development (HUD), and the Henry M. Jackson Foundation, consisted of educational materials that called for a national overhaul of land use controls. The initiative proposed that new land use controls were needed to directly address the nation's lack of housing diversity, traffic congestion, and environmental degradation.

The second initiative, created by the nonprofit Natural Resources Defense Council (NRDC) and the Surface Transportation Policy Project (STPP), consisted of a smart growth "toolkit" for policymakers. The toolkit promoted compact, walkable and transit-accessible development that would "compete better with sprawl in policy forums and in the marketplace."

In January 1999, President Clinton issued a "Livability Agenda" that contained funding for open space purchases (Better America Bonds), congestion reduction (Congestion Mitigation and Air Quality Improvement Program), and regional infrastructure improvements (Regional Connections Initiative). In FY 2000, appropriations for these initiatives totaled \$17 billion. Unfortunately, the appropriations ceased after the 2000 fiscal year, as the subsequent administration failed to allocate funding to continue the agenda.

Smart Growth and Conservation of Open Space:

Private Markets, Public Responsibilities

Open Space Conservation Tools

Agricultural and Forestal (A & F) Districts - A & F Districts assist in the conservation of farms and forests, but only for a specified period of time. The Districts restrict landowners' development rights to agricultural and forestal uses. In return, landowners pay lowest-use property taxes and receive immunity from nuisance actions and limited protection from the exercise of eminent domain by state agencies. In Virginia, section 15.2-4400 of the Code of Virginia allows localities to provide for A & F Districts for ten years.

Conservation Easements - A voluntary legal agreement in which a landowner gives up development rights to be held by an organization that protects scenic, natural, or historical resources. Conservation easements exist in perpetuity. Organizations often rank potential easement properties based on acreage, threat of development, and natural, cultural, historic, and scenic value.

Use Value Assessment - These programs allow agricultural, horticultural, forested or open space land to be taxed by the value of the land's current use as opposed to the market value, providing an incentive for landowners to not develop their land.

Land Trusts - A land trust is a private, nonprofit organization that protects natural or cultural resources by buying land and accepting conservation easements. Land trusts offer protection for open space, natural areas, historic resources, and working lands (forests and farmlands).

Purchase of Development Rights (PDR) - PDR programs allow a government agency or nonprofit organization to acquire a property's development rights. Such an arrangement places an easement on the parcel that ensures ongoing use as farmland and open space while limiting more intensive use. PDR programs operate in 17 states. In 2002, the Fauquier County Board of Supervisors established a formal Purchase of Development Rights program in order to protect the integrity of the land, as well as the agricultural industry, the leading industry in the county. As of April 2010, over 7,300 acres within the county have been approved for the program.

Transfer of Development Rights (TDR) - TDR programs protect natural areas by shifting development to alternative locations. Local governments establish, by ordinance, a preservation area that restricts all development. In exchange, landowners in another area receive development-right credits to sell on the open market. Money received for the credits pays landowners in the preservation area. Montgomery County, MD, implemented a TDR program in the early 1980s and as of June 2009, has preserved over 52,000 acres through the program.

Urban Growth Boundary (UGB) - A UGB is a regulatory boundary established to distinguish between urban and rural land uses. The UGB is designed to encourage growth within the urban area with higher density zoning and discourage it outside the boundary with lower density zoning and restricted public infrastructure. UGBs of various types have been implemented in several states.

Recognizing the effects smart growth development patterns have on reducing vehicular emissions, the EPA established a dedicated smart growth office in 2000. This office has encouraged partnerships and sponsored pilot projects and, in doing so, the EPA has raised a national awareness of this approach.

In 2005, the EPA started the Smart Growth Implementation Assistance Program, an annual technical assistance program which makes a contractor team available to winning regions to develop a plan that encourages growth while protecting economic and environmental interests.⁶

In June of 2009, a new vision for smart growth implementation was constructed with a partnership between the EPA, HUD and the Department of Transportation. Since its launch, this interagency partnership has aligned focuses and as of October 2010 have made hundreds of millions of dollars available in grants and funding.⁷ This targeted national approach indicates that the vision for sustainable growth stressed by the smart growth movement has established itself as a significant consideration for the future of America's development patterns.

Land Use Control in Virginia

Under a Virginia statute passed in 2007 (§ 15.2-2223.1), all counties have the authority to include Urban Development Areas (UDAs) in their comprehensive plans. UDAs are designated areas that a locality deems appropriate for high-

6 <http://www.epa.gov/smartgrowth/sgia.htm>

7 <http://www.epa.gov/smartgrowth/partnership/index.html>

Non-Federal Land Conversion in Virginia

Rural Land Converted to Developed Uses¹

1992-1997: 116,300 acres

1997-2007: 199,900 acres

Percent Change: +71.88 %

Forest Land Converted to Other Uses 2002-2007²

- 144,000 acres of forest were lost during this time

- Of this, 63% was converted to developed uses and about 30% was converted to agriculture

1 National Resources Inventory

2 US Forest Service Eighth Survey of Virginia's Forests

Smart Growth and Conservation of Open Space:

Private Markets, Public Responsibilities

density development, due to their proximity to transportation facilities, water and sewer infrastructure, or proximity to existing developed areas. UDAs may be areas targeted for infill and redevelopment.

Minimum residential and commercial densities have been established for UDAs, at four dwelling units per gross acre and 0.4 floor area ratio per gross acre, respectively. A UDA should be able to accommodate 10 to 20 years of the county's projected residential and commercial growth. UDA boundaries should be reexamined and revised if necessary every five years in conjunction with the update of the comprehensive plan.

The statute also encourages that the comprehensive plan describe any incentives used by the locality to promote development within UDAs. Such incentives may include rezoning property to permit higher density development by-right in the UDA, road and infrastructure impact fees, cluster development, and transfer of development rights.

Potential drawbacks of UDAs include increases in the price of land and housing within the UDA. Through cash proffers or road impact fees, home buyers outside of the UDA would bear the cost of needed public services.

Open Space Conservation

The protection of open space and farmland is an important, and often divisive, component of smart growth policies. In urban areas, open space conservation allows communities

Chesapeake Bay Watershed Protection Goals

On June 28, 2000, the Chesapeake Executive Council signed *Chesapeake 2000*, the new Baywide agreement that commits Maryland, Virginia, Pennsylvania and the District of Columbia to permanently preserve 20 percent of the land in the Chesapeake Bay watershed by 2010.

Virginia's progress toward these Chesapeake Bay watershed protection goals as of August 21, 2009¹:

Watershed Acres	Protected Acres	Percent Protected
13,831,890	2,541,105	18.4%

To reach the goal of protecting 20 percent of the Bay Watershed within Virginia, Virginia will need to protect 213,529 additional acres. According to the Chesapeake Bay Program, the regional goal (20% of the total watershed in VA, PA, MD, and DC) was reached in 2008, with 7.32 million acres conserved.²

¹ <http://vaperforms.virginia.gov/indicators/naturalresources/landpreservation.php>
² <http://cap.chesapeakebay.net/progress.htm>

to grow while protecting open space and the quality of life that attracts taxpaying residents and businesses, and can help make cities' residential neighborhoods more enjoyable. In suburban and rural areas, open space conservation protects undeveloped areas and agricultural economies, protects communities from flooding, and ensures that critical natural habitats remain undisturbed.

Private and public sector organizations have developed several funding tools in recent decades to address this concern. First, national, regional and local private organizations pursue open space preservation through gifts, bequests, and outright purchase agreements. Second, the federal government and several state governments directly fund land protection efforts. Third, farmland preservation efforts can involve tax incentives (e.g., assessment as agricultural uses), agricultural zoning provisions, purchase of development rights (PDR) programs, transfer of development rights (TDR) programs, and right-to-farm laws. Finally, private mechanisms such as conservation easements and land trusts can also effectively protect natural areas and farmland. A summary of these approaches is included in the box on the facing page.

Largest Land Conservation Organizations in Virginia
(Updated October 2010)

Organization	Acres Protected in Virginia
Virginia Outdoors Foundation	591,077
The Nature Conservancy	277,000
Valley Conservation Council	115,974
Civil War Preservation Trust	14,675
Land Trust of Virginia	10,760

Smart Growth and Conservation of Open Space:

Private Markets, Public Responsibilities

Land Conservation Efforts in Virginia

Between 1992 and 1997 in Virginia, approximately 116,000 acres of farmland were lost to development. Between 1996 and 2006, the rate of land consumption was 2.5 times greater than the rate of population growth. To address this rate of consumption, in 2006 Virginia Governor Tim Kaine established a goal to preserve 400,000 acres of open space, farms and forests during his administration- a goal surpassed with a total 424,103 acres of land conserved.⁸ This Goal was again established in 2010 by Governor Bob McDonnell, as of September 2010, 32,157 acres have been conserved, and progress can be tracked on the State's Department of Conservation and Recreation website.⁹

In Virginia, state and local agencies are undertaking several initiatives to conserve land. The state has developed a multi-faceted approach to land conservation by encouraging private donations to the Virginia Outdoors Foundation (VOF), securing federal funds, and spending state bond proceeds and general fund appropriations. The state also offers matching funds to local PDR programs. Previously, landowners who donated a conservation easement were exempt from federal estate taxes for up to 40 percent of their land value, but this expanded tax benefit expired in January 2010.

Virginia Land Conservation Foundation The Virginia Land Conservation Foundation, established in 1999, manages the Virginia Land Conservation Fund, a non-lapsing state treasury fund. The Fund provides grants to state agencies including the Virginia Outdoors Foundation (VOF), and matching grants to local governments and nonprofit organizations for land acquisition and PDR programs. The Foundation serves as the primary catalyst to foster state-local collaboration on behalf of land conservation. The fund received \$2 million in 2009, and \$2 million for 2010.

Office of Farmland Preservation In 2001, the Virginia General Assembly established the Office of Farmland Preservation, which operates within the The Virginia Department of Agriculture and Consumer Service. The program provides matching funds for local PDR programs with up to \$100,000 in funds for FY 2011.

⁸“400,000-Acre Land Conservation Goal Met.” Appomattoxnews.com. Jan. 2010.

⁹ http://www.dcr.virginia.gov/land_conservation/

The Virginia Outdoors Foundation (VOF) The Virginia General Assembly created the Virginia Outdoors Foundation in 1966 to encourage private donations to preserve open space in Virginia. The VOF currently holds over 3,056 easements on over 591,077 acres in 102 local jurisdictions.

Land Conservation Tax Incentives

The Virginia Land Conservation Incentives Act of 1999 significantly enhanced the tax benefits available to private landowners who donate land or conservation easements. Under the tax credit program, a landowner can receive an income tax credit equal to 40 percent of the fair market value of the donated land or easement. August 2006 amendments created an annual cap on land preservation tax credits of \$100 million.

This cap is indexed to the Consumer Price Index and increases regularly with inflation (in 2009, it was raised to \$106.6 million). Until 2009, tax credits for up to \$100,000 per year, were available, though this figure has been reduced to \$50,000 in 2010.¹⁰ Unused tax credits can be sold on the open market. Easements potentially resulting in more than \$1 million in tax credits must have their conservation value verified by the Department of Conservation and Recreation prior to registration.

¹⁰ <http://www.tax.virginia.gov/site.cfm?alias=indwhatsnew#Land>

Virginia Conservation Lands Sample Summaries:		
Of the estimated total land area of Virginia, 25.27 million acres, over 3.58 million acres or 14.17% is "currently protected". August 10, 2009		
GROUP	ACRES CONSERVED	PERCENTAGE OF TOTAL
Federal	2,329,800.13	65.06%
State	947,801.30	26.47%
Local	127,879.85	3.57%
Private	175,338.84	4.90%
TOTALS:	3,580,820.12	100.00%

http://www.dcr.virginia.gov/natural_heritage/clinfo.shtml#stats

Smart Growth and Conservation of Open Space:

Private Markets, Public Responsibilities

NATIONAL RESOURCES

Calthorpe, Peter. *The Regional City: Planning for the End of Sprawl*. Washington, D.C.: Island, 2001.

Duany, Andres. *Suburban Nation: the Rise of Sprawl and the Decline of the American Dream*. New York: North Point, 2000.

Farmland Information Center: <www.farmlandinfo.org>
Laris, Michael and Peter Whoriskey. "Loudoun's Ambitious Search for Perfection: County Aims to Keep Vast Acreage Rural" *Washington Post*, July 22, 2001.

Lopez, Russ. "Urban Sprawl and Risk for Being Overweight or Obese" *American Journal of Public Health*, September 2004: 94: 1574 - 1579.

Mitchell, John. "Urban Sprawl: The American Dream" *National Geographic*, July 2001: 48-73.

Montgomery Planning Board. www.mcparkandplanning.org/research/documents/TDRstatusreport-finaldraft.pdf

O'Toole, Randal. "The Folly of 'Smart Growth'." *Regulation Magazine*, Fall 2001: 20-25.

Research and Innovative Technology Administration. http://www.rita.dot.gov/publications/transportation_vision_2030/html/passenger_transportation.html

The National Center for Smart Growth Research and Education: www.smartgrowth.umd.edu

The Natural Resources Defense Council: www.nrdc.org

Smart Growth America: www.smartgrowthamerica.org

Land Trust Alliance: www.landtrustalliance.org

VIRGINIA AND REGIONAL RESOURCES

Civil War Preservation Trust: www.civilwar.org

Land Trust of Virginia: www.landtrustva.org

Valley Conservation Council: www.valleyconservation.org

The Nature Conservancy: www.nature.org

Virginia Outdoors Foundation:
www.virginiaoutdoorsfoundation.org

Virginia Land Conservation Foundation:
www.dcr.state.va.us/vlcf/index.htm

Virginia DCR, Office of Land Conservation
www.dcr.virginia.gov/land_conservation/index.shtml

Virginia Department of Forestry:
www.dof.virginia.gov

List of land conservation organizations in Virginia:
www.dcr.virginia.gov/land_conservation/wheretofind.shtml

Chesapeake Bay Program: www.chesapeakebay.net

Published Resources

Department of Conservation and Recreation

Directory of land trusts, Database of all conserved lands & VA Conservation Lands Needs Assessment (tool for integrating and coordinating the needs and strategies of different conservation interests; maps & targets ecosystems and open space land for conservation)
http://www.dcr.virginia.gov/land_conservation/

Piedmont Environmental Council

Handbook of sources of funds for conservation in VA
<http://www.pecva.org/anx/download/1141/handbookonline.pdf>

Valley Conservation Council

Better Models for Development in the Shenandoah Valley 2010
http://www.valleyconservation.org/Better_Models_2010.html

Edited November 2010 by Tim Bevins