

PURDUE EXTENSION

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Smart Growth and Protection of Natural Resources in Indiana



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Why Smart Growth?

Our health, our children's education, our commute to work and to the store, and the taxes we pay are just a few of the many quality-of-life-factors that we consider when we rent or purchase a home in a particular community. How, what, and where development occurs impacts our personal lives, our communities, and our nation.

Longer commuting times, traffic congestion, and air quality problems have resulted in communities reexamining their current development plans and looking at alternative ways to develop for the future. Also, today transportation accounts for one third of greenhouse gases (i.e., CO₂) affecting climate change.

Smart Growth is fiscally responsible. Sprawled residential development costs more in services than it generates in taxes. Communities are recognizing this and questioning the neglect of existing infrastructure for the alternative development of placing sewers, roads, and other services into farmland and open areas. The smart growth strategies of compact, mixed-use, and infill development help address this negative fiscal impact.

When a community chooses to develop using smart growth principles, new neighborhoods are created that are aesthetically pleasing and preexisting neighborhoods maintain their beauty. Using the principles of smart growth, residents have a sense of place and become more engaged in their community's

social and civic affairs, protect the surrounding environment, and stimulate economic growth. When development occurs using the principles of smart growth, the daily activities and quality of life for the community's residents frequently improve.







What Is Smart Growth?

Smart Growth serves the economy, the community, and the environment and takes away from the traditional growth/no growth question: "How and where should new development be accommodated?" Smart Growth principles include mixed-use development, walkable town centers and neighborhoods, mass transit accessibility, sustainable economic and social development, and preserved green space. Smart Growth is an approach to land-use planning that targets the state's resources and funding in ways that enhances the quality of life for the residents of Indiana

Ten Principles of Smart Growth

Smart Growth is one of many new strategies and tools local communities and counties can use to plan and protect their valuable natural resources. The following ten principles are the foundation for guiding Smart Growth strategies in your community or locality. Under each principle, you may find ways Smart Growth is being used in your community. If not, you can use the ideas under each principle to start a Smart Growth program in your community.

- 1) Allow Mixed Land Use: The integration of mixed land uses into communities is a critical component of achieving better places to live and thereby improving the quality of life for the residents.
 - Allow mixed-use options with zoning ordinances.
 - Zone areas by building type, not by building use only.
 - Convert abandoned malls to mixed land use.





- Provide financial incentives for mixed use.
- Protect water quality and natural resources.
- Promote health and quality of life.
- 2) Use Compact Building Design: Provide opportunities for communities to incorporate more compact building design as an alternative to the conventional, land-consumptive development practices.
 - Talk about **Design** not **Density**.
 - Protect water quality and minimize runoff (minimizes impervious surfaces).
 - Balance street type and building scale.
 - Ensure ready access to open space.
 - Ensure privacy with yard design.
 - Promote health and quality of life.







- **3) Increase Housing Choice:** *Provide housing choices for all income levels.*
 - Identify and market vacant buildings.
 - Revise codes to widen choice by builders.
 - Enact an inclusionary zoning ordinance.
 - Support community land trusts for homebuyers.

- **4) Create Walkable Communities:** *Create places where people live, work, learn, and play and that make these communities desirable from any point of view.*
 - Connect neighborhoods with pathways.
 - Put conveniences near homes.
 - Sidewalks alone will not be enough.
 - Make walking safe (crosswalks, speed bumps, traffic islands).
 - Connect shopping areas with pathways, sidewalks, and trails.
 - Improve health and quality of life.
- 5) Foster Distinctive, Attractive Communities with a Strong Sense of Place: Develop a vision and set the appropriate standards to meet the vision for development and construction within the community. The standards therefore correspond to the community's values of architectural beauty and distinctiveness, as well as provide greater choice in available housing and transportation.
 - Protect and preserve what is unique to the area
 - Plant trees; protect older trees during construction; have open spaces; preserve scenic vistas.
 - Allow sidewalk vending, dining, kiosks, etc.
 - Create opportunities for community interaction.
 - Use visual cues to define neighborhoods.
 - Establish funds for historic preservation.
 - Develop "wayfinding" systems in town centers.
 - Highlight cultural assets through public art and event nights.
 - Provide funding to create places of distinction.
- 6) Protect farms, Unique Natural Features, Critical Environmental Areas, and Open Spaces: Preserve critical environmental areas to improve a community's quality of life; guide new growth into existing communities.
 - Inventory special places and make plans to protect them.
 - Improve water quality and minimize runoff.
 - Establish zoning to encourage clustering.
 - Protect farmland and open lands with PDR/ TDR
 - Work with land trusts.
 - Connect greenways.





- 7) Direct New Development Toward Existing
 Communities and Infrastructure: By directing new
 development back towards the communities and using
 already existing infrastructure and resources, you
 ultimately conserve open space and natural resources
 on the urban fringe.
 - Facilitate programs that encourage home renovation and rehabilitation in existing neighborhoods.
 - Locate new public buildings in the town center, not on the fringe.
 - Strengthen infill and brownfield programs.
 - Upgrade existing infrastructure first.
- 8) Offer A Variety of Transportation Choices: The key is making available to the residents more choices in housing, shopping, communities, and transportation.
 - Provide auto, bicycle, pedestrian, and transit.
 - Link modes of transportation.
 - Build higher density around transit stops.
 - Think outside the car.
 - Improve health and quality of life.



- 9) Make Development Processes Predictable, Fair, Efficient, and Cost Effective: Make sure that the private sector is engaged in the Smart Growth process.
 - Conduct a Smart Growth audit to clean up local codes.
 - Assist developers who try smart growth ideas.
 - Use point-based project evaluation to encourage Smart Growth.
- 10) Involve Community Stakeholders: Make sure that the community is intimately involved in the process of Smart Growth, since the residents of the community know how they want their community to grow and their vision of self is reflected in their community.
 - Seek professional help in citizen outreach.
 - Seek a broad audience.
 - Use visioning.
 - Take citizen ideas to heart.
 - Work with the media.
 - Consider new ideas.

These principles work when our tax dollars are invested in growth and development and we expect our lives and communities to improve. We want to get the most for our money, build where it is most appropriate, and not duplicate previous expenditures. Some communities have found that they can make their tax dollars go further by using low-impact, compact development.

Examples of Smart Growth in Indiana

The following examples demonstrate a number of Smart Growth principles, including compact mixed use and walkable communities that protect farmland, open space, and valuable natural resources. Also included are examples of infill development, revitalization of downtown areas and neighborhoods, utilizing existing infrastructure, and transit-oriented development.

Lake Michigan Watershed Examples

Traditional Neighborhood Development in Porter County

This project began as a National Smart Growth Technical Assistance grant awarded by the Environmental Protection Agency (EPA) and the National Oceanographic and Atmospheric Administration (NOAA) in 2006. A two-day design charrette brought together stakeholders from the community, planners, and local officials to discuss and develop guidelines for a traditional neighborhood development. The resulting product was a guidance manual (see: http://www.epa. gov/smartgrowth/pdf/portercounty.pdf). The manual was adapted in June 2007 by the Porter County Plan Commission. The manual supplements the traditional neighborhood ordinance in Porter County for developers and builders to utilize as guidance towards smart growth traditional neighborhood design (TND) projects. In November 2008, the project was recognized as one of three Smart Growth Coastal City Winners in the Great Lakes. The award is sponsored by the Great Lakes Commission and the NOAA Coastal Services Center.

Portage Northside Plan (Portage)

The next example is a 1500-acre transit-oriented development associated with the Portage/Ogden Dunes South Shore commuter line serving the Chicago metro area. The development includes compact, mixed-use commercial/residential and open space natural areas as well as two marinas. Both marinas have access to the Lake Michigan waterfront via the Burn's Waterway. One



marina is for public use and the other one is for private use. Portage Lakefront Park includes trails, beach access, and open areas along the lakefront for recreational opportunities. The Ameriplex Park complex, a component of the development, includes both industrial and commercial areas.

Tryon Farm (Michigan City)

Located an hour's drive or train ride east of Chicago, Tryon Farm encompasses a prairie, farmland, ponds, dunes, and woods areas within its 170 acres. This conservation design development is complete with natural wetlands sewage system that operates independently of Michigan City's municipal system. It includes homes in what is known as the woods settlement, the pond settlement, and the farmstead settlement with trails opening to natural areas. In the ponds settlement, homes are designed with green roofs. All homes are designed to be energy efficient.

Coffee Creek (Chesterton)

Coffee Creek development in northwest Indiana highlights environmental restoration as an integral part of a 640-acre mixed-use community based on innovative sustainability concepts. State-of-the-art stormwater management practices have been designed for each phase of the development process. The system features subsurface flow constructed wetlands planted with native species selected for their effluent treatment and evapotranspiration capabilities. The treated wastewater is then piped to an absorption area planted with native grasses and flowers. The development also treats stormwater with soils and native prairie plants or best management practices (BMPs) to keep road salt and other contaminants out of Coffee Creek.

Other Indiana Smart Growth Examples

Fall Creek Place (Indianapolis)

Fall Creek Place is one of many gentrified neighborhoods in inner Indianapolis. At one time, however, the community had lost its appeal and the neighborhood had fallen into terrible disrepair. Entire city blocks were abandoned and the crime rate skyrocketed. In 2001, the city reclaimed the neighborhood by redeveloping it into a mixed income residential community. The city was awarded a HUD (U.S. Department of Housing and Urban Development) grant. Indianapolis used the monies to stimulate public and private investment in the redevelopment of Fall Creek Place.

The Monon Trail Greenway (Indianapolis/Carmel)

The Monon Trail Greenway is a rail trail stretching from downtown Indianapolis through Carmel to 146th Street. It soon will be extended to Westfield. Several new compact developments, including condominiums and apartment living, are being built with trail accessibility. Real estate value on and near the trail has increased significantly due to its recreational multi-use functions and access to natural resources.

Village of WestClay (Hamilton County)

Modeled after ground-breaking Kentlands in Maryland and approved by the Carmel City Council in 1999, the 686-acre mixed-use Village of WestClay, slated for completion in 2010, is becoming a model of New Urbanism for other municipalities in the Indianapolis region. The 1700 planned homes, town houses, and apartments in more than 20 distinct neighborhoods exhibit architecture dating back to the 19th and early 20th centuries. The architecture alone sets WestClay apart as an example of new urbanism development, featuring homes on narrow lots, front porches close to the street, and three-story cottages on alleys.

Vanderburgh County, IN

A group of interested individuals in Vanderburgh County organized a Smart Growth group with the guidance of Planning With Power several years ago. Their goals are to address land use development and its possible impact on natural resources around the Evansville Metro Area. The group is made up of local officials and agencies involved in land use and planning in the county. The Soil and Water Conservation District staff members, as well as other local officials, have been instrumental in providing leadership to the group, which continues to meet regularly to discuss Smart Growth issues in the county.

References

- Smart Growth Network and International City/County Management Association 2002. Getting to Smart Growth: 100 Policies for Implementation
- Smart Growth Network and International City/County Management Association 2003. *Getting to Smart Growth: 100 More Policies for Implementation*
- Anderson, Geoff and International City/County
 Management Association 1998. Why Smart Growth:
 A Primer
- Burchell, R., Mukherji, S., 2003. Conventional Development Versus Managed Growth: The Costs of Sprawl
- Cender & Company, 2007. Cost of Community Services Study: Understanding the Costs of Community Services in LaPorte County, Indiana
- Ewing, R., Bartholomew, K., Winkelman, S., Walters, J., and D. Chen. 2008. *Growing Cooler: The Evidence on Urban Development and Climate Change*
- Ewing, R., and Holder, R., 1998. Best Development Practices: A Primer for Smart Growth

For More Information

Additional related Planning with POWER Publications:

- ID-255 Protecting Our Water and Environmental Resources
- ID-256 Nonpoint Source Pollution: A Threat to Our Waters
- ID-257 Impacts of Development on Waterways
- ID-258 Strategies for Coping with Runoff
- ID-259 How to Get Started: Protecting Your Community From Polluted Runoff
- ID-260 The Relationship Between Land Use Decisions and the Impacts on Our Water and Natural Resources.
- FNR-245 Brownfields: A Rural Community Problem
- FNR-255 Stormwater Runoff
- FNR-256 Stormwater and Non-Point Source Pollution
- FNR-257 Open Space Planning

Planning with POWER Presentation module Model Ordinances available

These publications are available on the Planning With POWER website: www.planningwithpower.org

Also a new Web-based GIS planning tool and decision support system is now available at: http://ldm.agriculture.purdue.edu

If you are interested in pursuing the Smart Growth Principles, the protection of natural resources and natural resources based planning contact Robert McCormick at (765) 494-3627 and or rmccormi@purdue.edu.

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