Smart Growth

Background: As development “sprawls” into rural areas, land is being consumed at a rapid pace. In many communities the rate of development far exceeds the rate of population growth. Sprawl is “poorly planned development” in which natural and agricultural areas are transformed into low density residential neighborhoods, commercial centers, and business parks; abandoning the established infrastructure of cities. Smart growth is a means of combating this excessive consumption of land.

Smart growth, development that serves the economy, the community, and the environment, does not imply no growth, it simply strives to answer the question of “how and where should new development occur.”

Smart growth is development that promotes:

- **economic development and jobs** – create employment and business opportunities, improves local tax base, provides neighborhood services and amenities, and creates economically competitive communities.
- **strong neighborhoods** – provide a range of housing options giving people the opportunity to choose housing that best suits them. Smart growth provides the opportunity to walk, bike, drive, or use public transportation. It maintains and enhances the value of existing neighborhoods and creates a sense of community.
- **healthy communities** – provide families with a clean environment. Smart growth balances development and environmental protection; accommodating growth while preserving open space and critical habitat, reusing land, and protecting water supplies and air quality.

Principles:

**Mix land uses:** In many communities, current development patterns require a separation of land uses (commercial, residential, recreational, educational, and others). Smart growth promotes the integration of mixed land uses into communities as a key component to achieving a better place to live (Figure 1). By integrating mixed uses, alternatives to driving, such as walking or biking, become more practical. Mixed land use also supports a more diverse and sizeable population, which promotes public transit; economic development; and helps revitalize community life by making streets, public places, and retail stores places where people meet.

**Figure 1: Simulation of Smart Growth Mixed Land Use Project**
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Take advantage of compact building design: Land is being consumed at an alarming rate in America. Between 1982 and 1997, developed land in Erie County, Pennsylvania increased 49.9 percent while the population essentially remained the same. Evidence indicates that this development trend is continuing. Smart growth encourages communities to determine how and where they want to grow, and to incorporate more compact building design as an alternative to traditional land consumptive development (Figure 2). Compact development promotes the preservation of open space; leaves undeveloped land open to filter rainwater and snowmelt, which in turn reduces the quantity of storm water runoff and improves water quality; helps achieve population densities necessary for viable transportation alternatives; requires less utility infrastructure, leading to less expensive services and maintenance; and allows for more development on less land.

![Conventional Subdivision](image1.png) ![Cluster Subdivision](image2.png)

**Figure 2: Conventional Development versus Cluster Development (Preserved Open Space)**
*Images courtesy of: Center for Watershed Protection*

Create a range of housing opportunities: Smart growth promotes quality housing for people of all income levels. Housing represents a significant proportion of new construction and development, and is a key factor in determining a household’s access to transportation, services, and education; and consumption of energy and natural resources. By offering a wider range of housing choices, communities can reduce the environmental effects caused by auto-dependent development, use existing infrastructure resources more efficiently, and generate support for neighborhood transit stops, commercial centers, and other services (Figure 3).

![Simulation of Smart Growth Residential Housing Project (Chicago, IL)](image3.png)

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Create walkable communities: Prior to the mid-1900s, urban communities focused on the pedestrian, but recent dispersed patterns of development and the separation of land uses have led to an increased reliance on automobiles. Smart growth encourages walkable communities because they enhance mobility, reduce negative environmental consequences, strengthen economies, and support stronger communities. Walkable communities promote safe and easy access to mixed land uses such as residential, commercial, and recreation and services such as transportation centers, schools, and libraries; and create a streetscape.

Pennsylvania Lake Erie NEMO: www.behrend.psu.edu/seagrant/extension/nemo.html
that suits a range of alternative transportation means such as pedestrians, bicyclists, transit riders, and automobiles.

**Foster distinctive, attractive communities with a strong sense of place:** Conventional developmental patterns have helped create shopping centers and large suburban home developments that are largely indistinguishable from one another. Smart growth helps create communities that are distinctive, unique, and reflect the values of the residents; foster the types of physical environments that support a more cohesive community; encourage the construction and preservation of buildings that are assets to the community; and promote development that uses natural and manmade boundaries to create a sense of community. These practices create high quality communities that will retain their economic value and will provide residents with a distinctive place to live.

**Preserve open space, farmland, natural beauty, and critical environmental areas:** Open space preservation (Figure 2) is a key link to achieving better places to live, and supports the goals of smart growth by strengthening local economies, preserving critical environmental areas, providing recreational opportunities, and guiding new growth into existing communities. Networks of preserved open space can shape and direct urban form; thus, helping direct growth by locating new development in the most cost-efficient places – where roads, sewers, water lines, and other utilities currently exist. Open space can increase local property values (thereby increasing property tax base), stimulate the local economy through tourism, and reduce the need for tax increases by reducing the need for new infrastructure; ensure that agriculture lands are available; protect animal and plant habitat; and protect water resources by reducing storm water runoff and by filtering pollutants.

**Strengthen and direct development toward existing communities:** Urban communities that are experiencing rapid expansion at their edges are seeing the abandonment of the urban core and first-ring suburbs for newer, low density, dispersed developments. These developments are consuming large acreages of open space. Smart growth directs development towards communities already served by infrastructure; therefore, utilizing the resources of existing neighborhoods, and preserving open space and natural resources (Figure 4). By directing development to existing areas, communities benefit from a stronger tax base, closer proximity of jobs and services, reduced development in fringe areas, improved water quality through the reduction of impervious surfaces, and increased transportation choices.

**Provide a variety of transportation choices:** Providing people with transportation choices is a key component of smart growth as traffic congestion worsens across the United States. Building new roads will not ease the problem; studies show that as large new roads are built people increase their driving to take advantage of the new infrastructure. With the increased accessibility to surrounding lands caused by new roads, development patterns shift to create more growth and new traffic in the area. In response, communities are beginning to implement new approaches to transportation planning, such as better coordinating land use and transportation; increasing the availability of high quality transit service;
creating similarity and connectivity within their road networks; and ensuring connectivity between pedestrian, bike, transit, and road facilities.

Make development decisions predictable, fair, and cost effective: For smart growth to be successfully implemented it must be supported by the private sector. If investors, bankers, developers, builders, and others do not earn a profit, few smart growth projects will be implemented. Since the development industry is highly regulated, the value and desirability of a location are determined by municipal infrastructure and regulations; thus, driving the current developmental patterns. For smart growth to exist, state and local governments need to make an effort to make development decisions that support smart growth in a more timely, cost-effective, and predictable way for developers.

Encourage community and stakeholder collaboration in development decisions: Growth and development can create great places to live, work, and recreate if it is supported by the community’s vision. A key component of smart growth is to ensure early and frequent involvement of stakeholders to identify and address specific needs. This will provide the stakeholder with vital information about development options, giving them an increased understanding of the importance of and challenges associated with good planning and investment. Also, involving the community in the planning process improves public support for smart growth and often leads to strategies that fit the needs of each community.

Environmental Benefits: Smart growth development approaches lead to improved air and water quality, increased preservation of natural areas and open space, and increased revitalization of brownfield sites. This is achieved through practices that lessen the environmental impacts of development including: compact development, reduced impervious surfaces, improved storm water detention, protecting environmentally sensitive areas, mixing land uses (e.g., residential, office, and retail), transit accessibility, and support for pedestrian and bicycle activity.

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Pennsylvania Lake Erie NEMO: www.behrend.psu.edu/seagrant/extension/nemo.html