

RE59R09  
Smart Growth /Smart Energy

Based on the Massachusetts Executive Office of Energy and Environmental Affairs Smart Growth/Smart Energy Toolkit

I. INTRODUCTION: Smart Growth/Smart Energy is a course designed to introduce real estate professionals to the various concepts included in the Massachusetts Smart Growth/Smart Energy initiative. While recognizing that zoning regulations are managed by each individual community, the Commonwealth encourages communities to adopt and implement these smart growth/smart energy measures in order to realize the many environmental, fiscal, and social benefits of smarter energy and smarter land use.

II. WHAT IS SMART GROWTH? Smart growth is a principle of land development that emphasizes the mixing of land uses, increases the availability of a range of housing types in neighborhoods, takes advantage of compact design, fosters distinctive and attractive communities, preserves open space, farmland, natural beauty and critical environmental areas, strengthens existing communities, provides a variety of transportation choices

III. WHAT IS GREEN DEVELOPMENT? Land use planning concept that includes consideration of community-wide or regional environmental implications of development, and site-specific green building concepts. This includes city planning, environmental planning, architecture, and community building

A. BENEFITS OF GREEN DEVELOPMENT

- a. Environmental Responsiveness
- b. Resource Efficiency
- c. Community and Cultural Sensitivity

B. GREEN ENERGY: Using sources of energy considered to be environmentally friendly and non-polluting

- a. Geothermal
- b. Wind
- c. Solar
- d. Hydro
- e. Nuclear

IV. MASSACHUSETTS SMART GROWTH/SMART ENERGY TOOL KIT. The Executive Office of Energy and Environmental Affairs (EEA) provides a Smart Growth/Smart Energy Toolkit on behalf of the Commonwealth of Massachusetts. This Toolkit provides easy access to information on planning, zoning, subdivision, site design, and building construction techniques that can make smart growth and smart energy a reality in your community. The materials are designed to increase understanding of smart growth/smart energy tools and policies, as well as how to customize and apply the techniques to suit local circumstances.

V. SMART GROWTH CONCEPTS AND TECHNIQUES

A. ACCESSORY DWELLING UNITS (ADU)

1. BENEFIT: provide supplementary housing that can be integrated into existing single family neighborhoods to provide a typically lower priced housing alternative with little or no negative impact on the character of the neighborhood.

2. MASSACHUSETTS CASE STUDIES

- a. Lexington (suburban)
- b. Northampton (urban)
- c. Pelham (rural)

**B. PRESERVING AGRICULTURAL LAND AND FARMING OPPORTUNITES**

1. **BENEFIT:** enable existing farmlands to remain viable through the use of restrictions programs and marketing projects or tax breaks; see that existing agricultural lands developed in ways that decrease the impacts from conventional subdivision activity and preserve significant amounts of the open areas

2. **MASSACHUSETTS CASE STUDIES**

- a. Amherst
- b. Dartmouth
- c. Somerville

**C. BROWNFIELD RESTORATION: 1998 Brownfields Act**

1. **BENEFIT:** Redevelop brownfield sites to promote a smart growth agenda by revitalizing blighted urban areas, supporting local economic growth, and advancing environmental health.

2. **MASSACHUSETTS CASE STUDIES**

- a. New Bedford
- b. Springfield
- c. Cambridge
- d. North Adams
- e. Lawrence
- f. Beverly.

**D. BUSINESS IMPROVEMENT DISTRICTS (BID)**

1. **BENEFIT:** encourage special districts in which property owners vote to initiate, manage and finance supplemental services above and beyond the baseline of services already provided by their local city or town governments

2. **MASSACHUSETTS CASE STUDIES**

- a. Hyannis
- b. Springfield

**E. CHAPTERS 40R AND 40S**

1. **BENEFIT:** Chapter 40R of the Massachusetts General Laws encourages cities and towns to establish new overlay zoning districts to promote housing production and, more generally, smart growth development. Chapters 40R and 40S both provide financial incentives to communities to adopt these new zoning districts.

2. **MASSACHUSETTS CASE STUDIES**

- a. Watertown
- b. Kingston

**F. DISTRICT IMPROVEMENT FINANCING (DIF); TAX INCREMENT FINANCING (TIF)**

1. **BENEFIT:** economic tools that promote redevelopment by use of public/private partnerships. TIF offers tax breaks to developers, while DIF channels tax dollars into targeted redevelopment districts.

2. **MASSACHUSETTS CASE STUDIES**

- a. Worcester

- b. Concord
- c. Leominster

#### G. ENVIRONMENTAL JUSTICE

1. BENEFIT: based on the principle that all people have a right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment

#### 2. MASSACHUSETTS CASE STUDIES

- a. Jamaica Plain
- b. Lawrence

#### H. FORM BASED CODES (FBCs)

1. BENEFIT: can either replace or supplement standard text-based zoning, subdivision and other local regulations and are a method of regulating development to achieve a specific urban form

#### 2. MASSACHUSETTS CASE STUDIES

- a. Lowell
- b. Southfield

#### I. INCLUSIONARY Z ONING: - and moderate-income households

1. BENEFIT: requires a portion of the housing units in certain real estate developments to be reserved as affordable to low

#### 2. MASSACHUSETTS CASE STUDIES

- a. Dennis
- b. Barnstable
- c. Newton

#### J. LOW IMPACT DEVELOPMENT (LID)

1. BENEFIT: encourage a more sustainable land development approach that begins with a site planning process that first identifies critical natural resource areas for preservation

#### 2. MASSACHUSETTS CASE STUDIES

- a. Plymouth
- b. Lincoln
- c. Cambridge
- d. Ipswich River
- c. Tyngsboro
- d. Boston
- c. Cohasset
- d. Franklin
- e. Olmstead Green (Boston)

#### K. MILL REVITALIZATION DISTRICTS (MRD)

1. BENEFIT: encompass a historic mill (in larger cities, multiple mill buildings) and its surrounding neighborhoods. These surrounding areas are typically the canal and its banks, the worker housing, and utilitarian service buildings.

2. MASSACHUSETTS CASE STUDIES

- a. Maynard
- b. Northbridge
- c. Lawrence

L. OPEN SPACE RESIDENTIAL DESIGN (OSRD)

1. BENEFIT: an approach to residential development that promotes open space preservation based on environmental and social priorities

2. MASSACHUSETTS CASE STUDIES

- a. Newbury
- b. Hopkinton
- c. Rowley
- d. Bellingham
- e. Ipswich

M. SMART ENERGY

1. BENEFIT: provide information on actions that can be taken by municipalities, developers, organizations, and individuals to promote smart energy

2. The Massachusetts Office of Energy and Environmental Affairs website (<http://www.mass.gov/?pageID=eoeeahomepage&L=1&L0=Home&sid=Eoeea.>)

N. SMART PARKING

1. BENEFIT: A well planned and executed parking program is essential to establishing and maintaining a human-scale environment that emphasizes parking efficiency over supply.

2. MASSACHUSETTS CASE STUDIES

- a. Marlborough
- b. Middleborough
- c. Cambridge
- d. Oak Bluffs

O. TRADITIONAL NEIGHBORHOOD DESIGN (TND)

1. BENEFIT: also known as "new urbanism", "neo-traditional" or village-style development, includes a variety of housing types, a mix of land uses, an active center, a walkable design, and often a transit option within a compact neighborhood scale area either as infill in an existing developed area or as a district scale project.

2. MASSACHUSETTS CASE STUDIES

- a. Somerville
- b. Dennisport
- c. Mashpee

d. Northampton

P. TRANSFER OF DEVELOPMENT RIGHTS (TDR)

1. BENEFIT: shifting development densities within the community to achieve both open space and economic goals without changing their overall development potential. While less common, TDR can also be used for preservation of historic resources.

2. MASSACHUSETTS CASE STUDIES

a. Falmouth

Q. TRANSIT ORIENTED DEVELOPMENT (TOD)

1. BENEFIT: creates mixed-use, higher density communities that encourage people to live, work and shop near transit services and decrease their dependence on driving.

2. MASSACHUSETTS CASE STUDIES

a. Canton

b. Concord

c. Somerville

R. WASTEWATER ALTERNATIVES

1. BENEFIT: higher density development in areas without public water or sewer service presents special circumstances and unique challenges

2. Title V

3. Informational module. See: US Geological Survey Website (<http://www.usgs.gov/>)

S. WATER RESOURCE MANAGEMENT

1. BENEFIT: approaches to water management must ensure continued and sufficient quantity and quality of water for current and future human uses while maintaining ecological integrity

2. Informational module. See: Massachusetts DEP Website (<http://www.mass.gov/dep/water/resources/watercon.htm>)

T. WIND POWER

1. BENEFIT: Capitalizing on Massachusetts' wind resources, both land-based and off-shore, will increase our energy reliability, diversify energy supply, provide financial savings to consumers, decrease consumption of fossil fuels, and reduce greenhouse gas emissions as well as other pollutants

2. MASSACHUSETTS CASE STUDIES

a. Barnstable

b. Ipswich

c. Plymouth

VI. MODEL BYLAWS: In order to assist communities with their individual Smart Growth programs, the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) has provided an explanation of examples of the various bylaws adopted by Massachusetts communities. Please see: [http://www.mass.gov/envir/smart\\_growth\\_toolkit/bylaws/ADU-Bylaw.pdf](http://www.mass.gov/envir/smart_growth_toolkit/bylaws/ADU-Bylaw.pdf)

VII. GLOSSARY ([http://www.mass.gov/envir/smart\\_growth\\_toolkit/pages/glossary.html](http://www.mass.gov/envir/smart_growth_toolkit/pages/glossary.html))

Note: All case studies are available at [http://www.mass.gov/envir/smart\\_growth\\_toolkit/pages/SG-CS.html](http://www.mass.gov/envir/smart_growth_toolkit/pages/SG-CS.html).