

# **EPA Smart Growth Strategy**

## **Section 1: Introduction**

The environmental impacts of development directly affect the Agency's ability to achieve our statutorily mandated national air, water, and brownfield goals. Rapid, land-consumptive development patterns encroach on critical watershed lands and contribute to increased impervious surface, impairing habitat and water quality. Far-flung development with large distances separating homes from offices, shops, and entertainment limit transportation choices, increase emissions and impact human health. Disinvestment in established communities in favor of development on the metropolitan fringe undermines efforts to cleanup and redevelop brownfields.

The EPA Smart Growth Strategy will focus on these multi-media impacts of development. This Strategy will:

- Provide a comprehensive, strategic approach to addressing the environmental impacts of development -- recognizing development opportunities that can provide multi-media benefits and resolving potential conflicts between multiple environmental goals (e.g., arguments that brownfields redevelopment is in conflict with air and water quality goals);
- Build Agency capacity to be proactive on development-related environmental impacts, to work with states and localities before an environmental impact triggers regulatory responses, and to work within the Agency to ensure that its regulations do not encourage harmful patterns of development but also give credit for environmentally-responsible development;
- Enable the Agency to be responsive to states, localities, and the private sector when they need flexibility and innovation from the Agency on development-related issues (e.g., Atlantic Steel).

## **Section 2: Background**

Since 1996, EPA has taken explicit steps to address the environmental impacts of growth and development activities. Much has been done in that time through a variety of efforts. As a result the EPA has become a leader in the development of innovative strategies to mitigate the impacts of growth. However, it has not always been as strategic as it could be. In 2001, the GAO reviewed the Agency's smart growth activities and concluded that the Agency would benefit from a more strategic approach to the issue. A recent inventory of the Agency's smart growth work revealed over 100 projects in OAR, OW, ORD, OSWER, OPEI and the Regions on issues as diverse as: impacts of local development regulations on the environment, site design assistance for infill brownfields, and school siting implications for transportation and mobile source emissions.

In June 2003, a letter from the Administrator to the Assistant and Regional Administrators asked for their support in the development of an EPA smart growth strategy. The goals were better

coordination of existing resources dedicated to smart growth, consolidating resources within each office working on the topic, and ensuring EPA activities and programs consider their impacts on development, and the environmental and health impacts associated with development.

On November 19-20, 2003, OPEI convened a workshop of 35 EPA staff representing each program office and 8 regional offices to create an EPA Smart Growth Strategy. The goal of the retreat was to identify 5 areas where the Agency should focus its smart growth efforts to achieve the maximum environmental results. The areas were selected based on the following criteria:

- \$ Measurable environmental improvements would result from work in this area;
- \$ Success would result in real change at a scale that would be meaningful;
- \$ Activity would be consistent with EPA's Federal role in the issue.

The following document outlines the Smart Growth Strategy by describing each target issue, its impact on the environment and community health, and the primary strategies to address each target issue in a focused and coordinated way. Following this description, a list of proposed projects is presented that help achieve the strategies. These projects are multi-disciplinary, address the needs of federal, state and local governments, and seek to work with diverse partners to best support smart growth.

### **Section 3: Target Issues**

The Smart Growth Strategy workshop identified five areas where the Agency should focus its smart growth efforts to achieve the maximum environmental results, instigate real change and be consistent with EPA's federal role. The workshop participants identified the following target issues:

- 1. Promote Infill and Redevelopment;**
- 2. Catalyze Smart Growth Transportation Solutions;**
- 3. Partner for Innovative Development and Building Regulations;**
- 4. Support State Smart Growth Initiatives;**
- 5. Ensure EPA Policies Recognize the Environmental Benefits of Smart Growth**

The target issues represent the best opportunities to minimize the adverse impacts of development on environmental quality. Barriers to infill development, scarcity of innovative transportation solutions, and building and development regulations, each contribute significantly to our current development patterns and are underlying drivers of the attendant environmental problems. Working with states provides a unique opportunity to leverage resources and state decision-making. The final target area, working within our own programs and regions to ensure they recognize the superior performance of environmentally-friendly development, provides the

opportunity to address the areas of our work which may affect development. Perhaps more importantly, working internally shows that we are taking steps to make changes of our own.

The following sections describe the target issues more fully, present priority strategies to guide the Agency, and highlight proposed projects to help EPA achieve the goals of the smart growth strategy. The projects selected are intended to:

- \$ best illustrate the target and strategy goals
- \$ demonstrate a high likelihood of success
- \$ have the biggest impact on supporting environmentally-friendly development

Additional projects are listed in the appendix. These are intended to help illustrate the diversity of on-going smart growth work taking place in EPA program and regional offices, but this is not a comprehensive list of all such activity.

## **1. Promote infill and redevelopment**

Communities that accommodate more infill and redevelopment can greatly reduce the environmental impacts of development. One study estimates that every acre of brownfield developed avoids 4.5 acres of greenfield development. Infill can reduce overall impervious surface in a watershed, cut trip times and distances, provide more transportation options, help protect human health and even provide private capital to upgrade infrastructure or clean up contamination. EPA can support communities and other partners interested in addressing factors which may discourage infill projects such as cost uncertainty, long project reviews and an unpredictable approval process.

### **Strategies:**

1. Develop model techniques to increase predictability and reduce time in the planning, financing and approval processes for infill and redevelopment projects.
2. Work with local governments and the private sector to identify market barriers to infill (land assembly, title clearance, etc.) and develop techniques and institutional capacity to address them.
3. Educate communities and local governments on the benefits infill can bring and the techniques for making it work.

## **2. Catalyze smart growth transportation solutions**

A transportation system that supports smart growth is pedestrian-friendly, increases accessibility, has well-connected gridded streets, provides transit opportunities, maximizes the use of existing facilities, and is coordinated with the surrounding development. Less environmentally-friendly transportation projects may more greatly disrupt animal habitat, damage ecosystems, degrade wetlands and source waters, and increase stormwater runoff. These transportation projects may also lead to greater increases in air emissions resulting from increases in travel, impact human health, and may lead to growth in outlying areas.

Smart growth seeks to minimize these impacts by increasing transportation choices, improving existing infrastructure, and encouraging more compact development patterns.

**Strategies:**

1. Work with transportation officials, local leaders, metropolitan planning organizations (MPOs) and the development community to consider a wider range of transportation system and mode alternatives.
2. Assist states and MPOs to better assess the impacts of alternative transportation and development scenarios (transportation models, impact analysis tools, etc.)
3. Educate the public, communities, local governments and states on the environmental, fiscal, travel, health and other impacts of various transportation investments.

**3. Partner for Innovative Development and Building Regulations**

Many communities want to create new neighborhoods, or expand existing ones, using compact, pedestrian-friendly designs. As they work towards this goal, they often find it difficult or illegal to do so because their regulations prohibit narrow setbacks, combining retail uses with residences and other important building techniques. Communities are looking for assistance and expertise to change their regulations and codes to create these new neighborhoods. These changes can also give communities an environmentally beneficial development pattern that helps reduce travel times between destinations and protect sensitive watersheds from development.

**Strategies:**

1. Help local governments identify and address existing regulatory barriers to smart growth.
2. Work with state and local officials to create development review processes that provide speed and predictability for smart growth projects.
3. Cooperate with national standard setting organizations that impact local development (building and fire codes, schools siting, road engineering) to provide smart growth alternatives.

**4. Support State Smart Growth Initiatives**

States are key players in creating environmentally-friendly development through infrastructure investment decisions, programs to protect sensitive lands and by being leaders on smart growth. Many states are looking to change their policies and investment strategies to support healthier development patterns. States can focus their programs and investments to support existing towns and communities, thereby improving their fiscal health and quality of life. These smart growth initiatives can help the state protect its air and water resources and can spur brownfields reuse.

**Strategies:**

1. Support state efforts to invest in infrastructure that strengthens existing communities.

2. Encourage coordination of smart growth objectives across state agencies and the governor's office.
3. Promote state smart growth leaders and support development of additional leadership.

## **5. Ensure EPA Policies Recognize the Environmental Benefits of Smart Growth**

Regulations, policies, guidance and funding decisions made by EPA can impact patterns of development. Water infrastructure investments, rulings on stormwater, emissions regulations and permitting decisions influence where development takes place and what it will look like. Through NEPA and Section 309 of the Clean Air Act, EPA reviewers also look at the direct, indirect and cumulative environmental impacts resulting from proposed activities, including development, associated with individual projects. Some organizations have criticized the Agency for regulations that may encourage environmentally wasteful development patterns. At the same time, program and regional staff are already working to create flexibility and recognize the benefits of environmentally sensitive development. We can build on these efforts.

### **Strategies:**

1. Create flexibility for water infrastructure investment and stormwater policies to recognize the benefits of environmentally-friendly development in protecting water quality.
2. Review air quality policies, including mobile source accounting and crediting, for flexibility to recognize smart growth benefits.
3. Consider incorporating smart growth criteria into appropriate discretionary funding programs.
4. Support analysis in NEPA documents of environmental impacts from land development and recognize the ability of alternative development scenarios to reduce potential impacts.

## **Section 4: Proposed Projects**

EPA can address these target issues through a comprehensive set of multi-media projects. The projects deal with one or more of the target issues, have clear audiences and concrete outcomes, and will create measurable environmental results.

### **1. Education and Outreach Campaign**

Information is key to creating more environmentally-friendly development. When local governments, citizens, the business community and others see both the impacts of current development practices *and* the availability of viable alternatives it can lead to more environmentally-friendly development. EPA will conduct outreach to make localities familiar with development options that reduce the water, air, and land impacts and which meet economic and community goals.

Outreach will build upon existing Agency materials and expertise. Activities will include:

- Standardized Agency presentations on smart growth and opportunities to improve the air, water, and land impacts of development;
- Outreach by Headquarters and Regional staff and through EPA sponsored activities such as Regional smart growth speaker series' and sponsorship of local workshops.
- Partnerships with key organizations to educate their membership and reach decision-makers such as developers, local government officials, infrastructure providers, etc.
- A comprehensive portal and set of materials designed for proactive distribution to inform the general public (publications, web site, sample presentations, photo library, policies, factoids, etc.).

Strategies Addressed: Regulations, Infill, Transportation, States

Participants: \_\_\_\_\_

### **2. Building Regulations and Development Review Technical Assistance**

Current development regulations frequently act as barriers to innovative development strategies. As interest in alternative growth practices has increased, localities have expressed a desire to change their regulations to level the playing field between environmentally-friendly development and conventional practices. However, many lack the capacity, expertise, and examples to initiate reforms. They are looking for assistance in their efforts to create better community, economic, and environmental outcomes from their development. The EPA will deliver resources and technical assistance to communities to foster improved environmental performance, create examples for other communities to follow, develop a more specific and thorough understanding of local regulatory barriers to smart growth and illustrate the effects of current policies through build-out analysis.

Assistance will focus on helping communities that want to create options for:

- Zoning regulations;
- Building and rehabilitation codes;

- Comprehensive plans
- Development and review process

Strategies Addressed: Development regulations, Infill

Participants: \_\_\_\_\_

### **3. National Standard Setting Organizations to Include Smart Growth Options**

Several national standard setting organizations impact development at the local level. Issues such as road width engineering standards, fire and emergency response neighborhood design requirements, and school siting standards have direct and significant impacts on how a community develops, how much impervious surface is created, and how much air emissions may be produced. Many standards preclude smart growth and effectively encourage conventional, dispersed development patterns with wider roads, larger intersections, and large-scale school complexes. They do not consider the different dimensions needed to create walkable neighborhoods, with community schools and a mix of transportation options. Changing standards to make smart growth options allowable will have environmental benefits and protect human health.

EPA will work with national standard setting organizations to support the development of guidelines that are compatible with smart growth. Such organizations include Institute of Transportation Engineers, National Fire Protection Association, Council of Educational Facility Planners, Building Owners and Managers Association International, and the American Planning Association, among others.

Strategies addressed: Infill, Transportation, Building Regulations, States

Participants: \_\_\_\_\_

### **4. State/MPO focus on Transportation and Development Alternatives**

Metropolitan Planning Organizations (MPOs) and states use transportation models to evaluate the effectiveness of different transportation investments. It is generally accepted that these models are insensitive to the effects of smart growth investments (typical shortcomings include insensitivity to short trips, walking, bicycling, transit, peak spreading, the presence or absence of smaller roads, and complex multi-mode trips). Rarely do these models consider development alternatives and most regard the built environment as a fixed element in long-term analyses. As a result, a large number of potential transportation solutions are often removed from consideration due to lack of information and analytical capacity.

The EPA will provide MPOs and states with resources and technical assistance to:

- Develop alternative transportation investment scenarios;
- Upgrade existing tools so that current and future scenarios can be properly analyzed; and

- Support development of new modeling tools and databases that integrate development alternatives with transportation investments.

Strategies addressed: Transportation, Infill

Participants: \_\_\_\_\_

## 5. State Smart Growth Initiatives

Governors in South Carolina, Massachusetts, Pennsylvania, California, Michigan and elsewhere have expressed interest in integrating smart growth objectives into their state programs. Successful integration could leverage environmental benefits from the actions of state departments of transportation, housing, economic development, and treasury. States requesting assistance will receive EPA resources to support smart growth efforts. EPA's support will be guided by states' individual interests. Projects may include collaborative development of new school siting standards and funding formulas, development of a safe routes to school initiative, adaptation of model redevelopment codes, identification of state DOT best practices in smart growth transportation, etc. To support the states EPA will:

- Fund development of state programs and policies that help coordinate development and investment decisions across state departments;
- Provide direct technical assistance to help states adopt new models, facilitate expert reviews, integrate fix-it first policies and support public involvement; and,
- Develop a menu of state level policies and programs (organized by Department) that promote more environmentally-responsible development.

Strategies addressed: States, Infill, Transportation

Participants: \_\_\_\_\_

## 6. Infill and Transit-Oriented Development Initiative

Infill and transit-oriented development can deliver multi-media benefits by reducing auto trip distances, providing transportation choices, reducing impervious surfaces, and preserving open space. This type of development provides more people with better access to shopping, employment or transportation hubs and promotes reuse of existing impervious surface instead of spreading out development. The EPA will create a suite of resources to help communities and states that want to increase their infill and transit-oriented development. Actions will include:

- Educate stakeholders on the transportation and environmental benefits of infill and TOD;
- Identify key policies and programs that encourage infill and TOD, such as parking replacement standards, transit agency land disposition policies, land assembly mechanisms, title clearance, foreclosure and nuisance abatement rules for vacant properties;
- Provide direct assistance to states and localities such as infill audits, design assistance,

consensus building resources, and market assessments, advice from and peer matching with successful TOD developers, and traffic and parking impact/management strategies;

- Create institutional capacity within local and state governments to focus on catalyzing infill and TOD.

Strategies addressed: Infill, transportation

Participants: \_\_\_\_\_

## **7. EPA Policies and the Benefits of Smart Growth**

EPA policies, regulations and funding decisions impact state investments in infrastructure (State Revolving Loan Fund, NEPA, brownfields, State Implementation Plans, water regulations).

These decisions impact many state and regional decisions concerning development patterns -- where to expand new regional development, how to reinvest in existing communities, and how to integrate smart growth benefits into transportation planning. EPA will address direct and indirect development impacts of our regulations, policies, and programs. Specifically, we will:

1) seek to ensure that the Agency's actions do not inadvertently obstruct environmentally-friendly development options, and, 2) where localities and states choose development options which improve environmental performance, ensure that our programs, policies and regulations recognize these benefits in a substantive manner. To carry this agenda forward the Agency will:

- Work with states and localities on State Revolving Loan Fund implementation options that support smart growth by incorporating it into funding decisions.
- Conduct a multi-stakeholder forum to examine the Clean Air Act regulations, policies, and implementation to determine its impact on development and identify changes that support better environmental outcomes within the development sector.
- Examine the impacts of state and local NPDES stormwater general permitting rules and practices on development patterns and identify/develop practices that support development patterns with multi-media benefits.
- Make smart growth projects an option under the Agency's SEP policy.
- Provide technical support and resources to partner with states and localities that wish to pilot regulatory implementation strategies that support smart growth.
- Conduct scientific research to support the Agency strategy such as measuring environmental benefits of smart growth development patterns for air and water quality and protection of sensitive ecosystems and human health.
- Work with OSWER, OAR, and OW to identify opportunities to incorporate environmentally-friendly development criteria into funding programs.
- Develop reference materials for EPA 309 and NEPA compliance coordinators to address growth-related environmental impacts in NEPA documents.

Strategies Addressed: Internal EPA actions, Infill, Transportation

Participants: \_\_\_\_\_