

Air Quality

Applying the principles of Smart Growth to future urban planning activities will decrease the adverse effects of poor air quality and improve the health of residents. By providing a variety of transportation choices and creating safe, walkable neighborhoods, the subsequent decrease in traffic congestion will improve air quality and promote exercise.

Case Studies

- [New Jersey - Hudson County](#)
Communities throughout New Jersey are following Smart Growth guidelines to enhance quality of life and create sustainable economic opportunities for their residents—all the while encouraging environmental and historic preservation.
- [Illinois – Chicago](#)
Chicago is a leader in urban forestry and heat island mitigation. The city has adopted an open space impact fee ordinance that requires new residential developments to contribute a proportionate amount of open space or recreational facilities, or to pay fees that ensure community residents of continued access to green space. Chicago also replaced a 10,080 ft² conventionally paved alley with a light-colored permeable gravel pave system, which has eliminated chronic flooding without requiring the installation of a sewer system. In addition, between 1991 and 1998, Chicago planted over 500,000 trees and achieved a citywide tree count of 4.1 million. Chicago's Bureau of Forestry now plants a minimum of 5,000 new trees per year and plans to install --in addition to 120 miles of existing median planters --280 miles of new median planters by 2005. In June 2001, Chicago amended its energy code to include requirements for reflective or green roofs.
- [Urban Heat Islands](#)
A heat island is an umbrella of air or built-up area, often over a city, that is warmer than the air surrounding it. In general, summertime heat islands raise air conditioning demand, air pollution levels (particularly smog), and greenhouse gas emissions. They also increase the incidence of heat-related illness and mortality. Smart growth development strategies provide an opportunity to reduce heat islands. In addition to mitigating the heat island effect, smart growth provides a framework for increasing regional environmental protection, enhancing community character, and strengthening local economies.
- [Parking](#)
One of the biggest challenges facing smart growth is identifying new ways to address the need for parking while minimizing its negative impacts and encouraging better designs. Parking is consuming a huge amount of land that could otherwise be developed. Surface and structured parking lots present sterile, unattractive environments that deaden city and suburban streets alike, further isolate uses and preclude lively pedestrian-friendly streets. As developers

attempt to meet the parking requirements of their projects, they find themselves beset with obstacles related to zoning, financing, and design, just to name a few. Parking requirements now drive many site designs, and are often the make or break issue for financing new developments.

Other Resources

- [Smart Growth Resources on the Environment](#)
 - The prevalence of many of our current environmental challenges -- air and water pollution; global warming, habitat fragmentation and conversion -- is in part due to the way in which we have built our neighborhoods, communities and metropolitan areas during the past half-century -- dispersed, inaccessible, and automobile-oriented -- in a word, sprawling. Smart Growth has many examples of communities' environmental progress being made.
- [Clean Communities on the Move: A Partnership-Driven Approach to Clean Air and Smart Transportation](#)
 - The National Association of Local Government Environmental Professionals (NALGEP) represents local communities across the nation who are seeking innovative approaches to their environmental and community challenges. This *Clean Communities on the Move* report examines the contributions that voluntary approaches are making to achieving clean air goals around the nation and draws lessons about how federal, state, and local officials can better work together to make these programs more effective and commonplace.
- [Air Quality and Smart Growth: Planning for Cleaner Air](#)
 - This is the sixteenth in a series of translation papers published by the Funders' Network to translate the impact of sprawl and urban disinvestment upon issues of importance to our communities and environment and to suggest opportunities for progress that would be created by smarter growth policies and practices. Other issues addressed in the series of translation papers include energy, water, community development, arts, health, biodiversity, children and families, education, aging, transportation, agriculture, civic engagement, parks and open space, workforce development, and social equity.
- [Profiles of Local Clean Air Innovation: Empowering Communities to Meet the Air Quality Challenges of the 21st Century](#)
 - *Profiles of Local Clean Air Innovation* includes 20 findings that present the views of local government officials on new approaches and partnerships for clean air communities. Key conclusions that emerge from this report include:
 - Local government officials believe that lasting clean air progress requires new, community-based approaches that complement traditional Clean Air Act controls

- Localities need more Clean Air Act funding to support local clean air innovation as well as stable sources of funding to support ongoing air quality programs
- Localities need improved tools to measure the emission benefit of innovative, community-based practices such as smart growth, clean energy, alternative transportation, pollution prevention, and public outreach.
- EPA and the states should provide regulatory credit under the Clean Air Act for innovative air quality practices
- Localities need state and federal support to establish regional air partnerships to coordinate air monitoring, planning, and control measures across metropolitan regions with common air pollution issues.
 - EPA should launch new outreach and technical assistance programs to assist local governments in promoting innovative air quality projects.