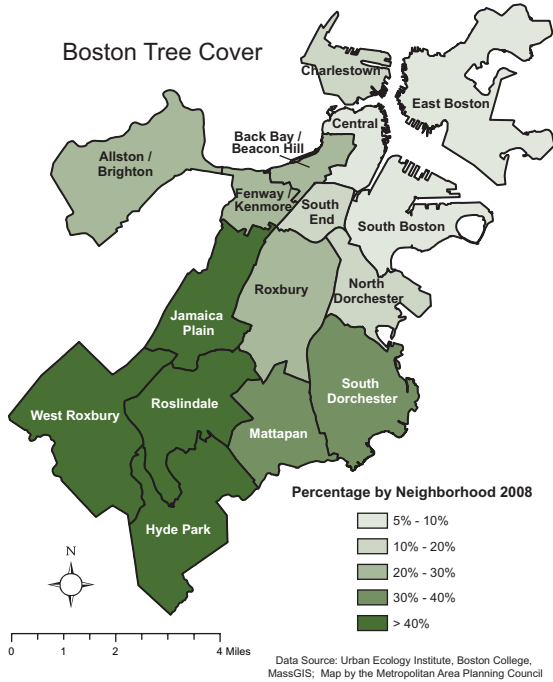


## Environment & Energy

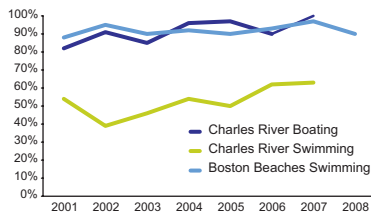


**A**s climate change and environmental sustainability move to the top of the national and Massachusetts policy agendas, Boston is at the forefront of efforts to address these challenges at the municipal level, setting aggressive objectives for reducing greenhouse gas emissions, planting trees and increasing recycling, although it is too early to evaluate progress.

### Urban Environment

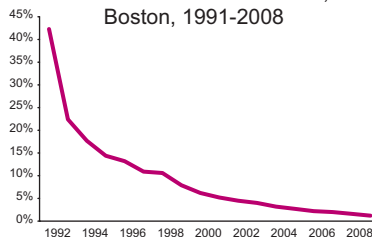
**Urban Tree Cover:** In 2007 the City of Boston and its partners in the Boston Urban Forest Coalition launched the Grow Boston Greener Campaign to plant 100,000 new trees by 2020, which would increase tree canopy cover from 29% to 35% by 2030. Initial goals have been met with 1,000 trees planted in 2007 and 3,000 in 2008 with a primary focus on communities with low canopy cover. In total, the City of Boston has 5,518 acres of protected open space.

Percent of Days Meeting Standards for Boating & Swimming, Charles River & Boston Beaches, 2001-2007/08\*



Source: Environmental Protection Agency, Massachusetts Department of Public Health  
\* Charles River data available through 2007 only

Percent of Children Screened with Elevated Blood Lead Levels, Boston, 1991-2008



Source: Boston Public Health Commission

**Recycling:** Boston set a goal of increasing recycling by 10% between 2007 and 2012. Public Works Department data indicate that the recycling rate rose to 15% in the last six months of 2008 and that the amount of waste generated per Boston household fell from 150 pounds in 2006 to 134 pounds in 2008.

### Environmental Health

**Air Quality:** Boston's air has become cleaner, with ambient particulate matter and other pollutants on the decline. However, SustainLane ranks Boston 25th among the 50 largest US cities in air quality.

**Water Quality:** After the Environmental Protection Agency set a goal of a swimmable Charles River by 2005, clean-up efforts led to a dramatic increase in the number of days the Charles was safe for boating and swimming. The EPA's annual grade for the Charles rose from D in 1995 to an all-time high of B++ in 2007 and then dropped back to B+ in 2008. The EPA began a similar program for the Mystic River in 2006 and its initial grade of D rose to C- in 2008.

**Elevated Lead Levels:** The percent of screened children testing positive for elevated blood lead levels in Boston continued to decline, reaching an all-time low of 1.2% in 2008. Since 1991—when 42% of screened children tested positive—rates of elevated lead have declined by more than 90% and

Boston may come close to achieving the goal of effectively eliminating preventable lead poisoning by 2010. Two neighborhoods, North and South Dorchester, continue to experience higher lead poisoning rates (2.2% and 1.6%) than the citywide average.

## Sustainability

In 2008, *Popular Science* ranked Boston as the third “greenest” city in the US and SustainLane rated Boston sixth on its ranking of the nation’s most sustainable cities (see chart).

**Greenhouse Gas Emissions:** In April 2007 Mayor Thomas M. Menino issued an executive order to reduce the City’s annual greenhouse gas emissions 7% below 1990 levels by 2012 and 80% by 2050. The City’s total greenhouse gas emissions were calculated at 7.95 million tons in FY2005.

Metro Boston emitted 2.024 tons of carbon from residential energy and transportation use in 2005, less than the 2.6 tons from the average US resident, placing MetroBoston 20th out of 100 areas analyzed.

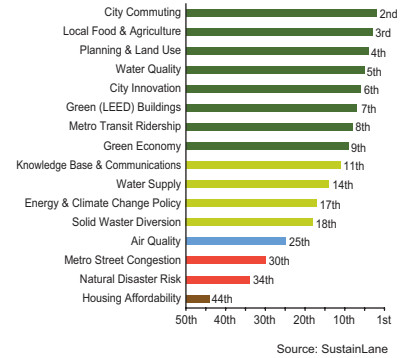
**Green Building Code & Green Buildings:** In January 2007, Boston became the first major city in the US to require most new private development to meet standards for “green” or high performance buildings equivalent to those established by the US Green Building Council under its Leadership in Energy and Environmental Design, or LEED, program. The number of building projects registered with LEED (but not yet certified) rose from 7 in November 2006 to 81 in November 2008. LEED-certified buildings in Boston rose from 9 in November 2006 to 21 in June 2008.

## Energy

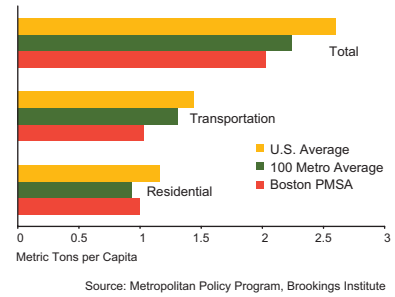
**Energy Use:** Massachusetts is one of the most energy-efficient states, ranked 49th of 50 by the Energy Information Administration in 2006 on per capita energy consumption and 48th in energy consumed per dollar of gross domestic product. Following years of steady increases, Massachusetts’ total energy consumption dropped from 1.56 trillion BTU in 2005 to 1.48 trillion BTU in 2006.

**Renewable Energy:** Massachusetts utilities are required to obtain 15% of their power from renewable sources by 2020. In June 2007, Boston became one of 13 inaugural Solar America Cities, with a goal of increasing solar energy installations from 0.5 megawatts to 25 MW by 2015, with 1.8 MW of solar capacity installed as of early 2009. The City has also committed to buying at least 11% of its energy from renewable sources. At the state level, the Patrick Administration set a goal of 250 MW of installed solar capacity by 2017, with 7.2 MW as of 2009 and 3.8 MW in the pipeline.

Boston's Rank on SustainLane Sustainability Measures, Among 50 Largest US Cities, 2008



Per Capita Carbon Emissions Metro Boston, US & 100 City Average, 2005



Massachusetts Electricity Generation by Source Type, January 2009

