

Green Municipal Building Ordinances Donna Budniewski University at Buffalo Law Student



Green Municipal Buildings? Where are They?

In 2006 the town of Babylon, NY adopted a local law that requires LEED certification for “new construction of commercial buildings, office buildings, industrial buildings, multiple residence, or senior citizen multiple residence over 4,000 square feet.”¹ As an incentive, the town will refund certification fees paid by developers if a new project achieves LEED status.

This month, Bridgewater, New Jersey, unveiled its new \$23.9 million **green municipal complex**, funded by a bond ordinance in 2007 that added \$44 in property taxes homeowners. It is one of the first LEED certified municipal buildings in New Jersey. Green features include “automatic shades that go up and down depending on the position of the sun - allowing rooms to gather and retain heat” and a system that collects rain to water the property's landscaping.²

Covered in long-lasting copper and using photo voltaic cells, **City Hall in Austin, Texas** is LEED-Gold certified. The city is home to ten LEED-certified municipal buildings, with about 14 more LEED municipal building projects underway (planning phase or under construction. See the city's website for more information:
http://www.ci.austin.tx.us/publicworks/sustainability/new_bldgs_renovations.htm).

Maplewood, New Jersey, is home to the state's first green municipal building. In 2008, a **police and court building** was completed and certified LEED-Silver. The building uses solar panels; live data showing how much energy they produce is found here:
<http://view2.fatspaniel.net/SolarEnergySystems/maplewoodpolice/HostedAdminView.html?&eid=76359> The city undertook an energy audit of its municipal buildings and is "now implementing recommended retro-fits, including new windows, insulation, thermostatic controls, new lighting, etc."³

Queens (NY) **Botanical Gardens Visitor and Administration Center** is, according to its website, "the most advanced green building in New York City."⁴ Opened in 2007, the building boasts LEED-Platinum certification—the highest rating possible. The building uses 82 percent less water than buildings similar in size, uses geothermal heating and solar panels, a planted green roof, water recycling systems, and two composting toilets. Its solar panels contribute 17 percent of the energy used at the center. The Borough of Queens financed construction costs of around \$12 million.⁵



Who Is Mandating Green Building Ordinances? And What Can Buffalo Learn from Their Efforts?

Cities all over the U.S., from New York City to Seattle to

Washington, D.C., have jumped on the green ordinance bandwagon for municipal buildings. About 41 cities in California have their own green building ordinances.⁶ (In addition, this year California mandated an all-encompassing plan requiring that all new construction in the state adhere to its new Green Building Standards Code).⁷

A study by the Rockingham, New Hampshire Planning Council found that *most* of the cities it surveyed with green building ordinances chose LEED-silver as the standard for municipal buildings.

The U.S. Green Building Council summarizes in a 2009 report (<http://www.usgbc.org/ShowFile.aspx?DocumentID=2021>) city and state efforts to implement LEED-centered building ordinances—most of which offer financial incentives for developers to meet the highest LEED-standard possible. For example, in Chatham Co. Georgia, full tax abatement is possible for commercial projects meeting LEED-Gold standard during the first five years upon completion. The USGBC report will be a vital tool for structuring Buffalo’s green building ordinance to ensure that it has teeth and addresses its potential weaknesses in gaining potential developer compliance. The report offers numerous green building ordinance models that account for many of the same demographic issues Buffalo faces.

For example, **Cincinnati, Ohio**, our more progressive Rustbelt neighbor, offers powerful incentives to developers, including a 100 percent “property tax exemption for developments that meet a minimum of LEED Certified for newly constructed or rehabilitated commercial or residential buildings. For buildings that meet LEED Certified, Silver and Gold, the maximum amount of abatement per dwelling unit is \$500,000 over 15 years for new construction or over 10 years for renovation/ remodel. There is no maximum for LEED Platinum.”

In **Arlington, Virginia**, not only are commercial projects achieving LEED



certification allowed to build at a higher density, but all developments are required to contribute to a fund for “county-wide education and outreach activities”; monies that are refunded if the project is LEED-certified.

Seattle, Washington, invested over \$4 million during 2001-2005 in LEED building projects.⁸ Because it required all new city buildings over 5,000 feet to meet LEED-requirements, “it now has one of the highest concentrations of sustainable buildings in the country and a powerful sustainable building industry worth \$671 million.”⁹ Investment in its green infrastructure is ongoing, handled through a city-business unit called City Green Building. Two of its municipal buildings—the Seattle Library and Seattle Justice Center—are models of energy efficiency best practices. The library alone saves 4.5 million kWh/yr in electricity and prevents 181 tons of CO² from entering the atmosphere.¹⁰ Seattle’s efforts to green its buildings created an economic engine, bringing jobs and economic sustainability to the city as well.¹¹ In a city like Buffalo, where jobs and demographic sustainability are lacking, cities like Seattle should serve as a primer and as inspiration for taking bold steps to green the city’s municipal core.

Most cities use LEED standards as their greening tool; for example, in **Washington D.C.**, all new public buildings must be built to comply with LEED Standards. Some criticism of LEED standards has emerged over the years, however -- namely that LEED doesn’t measure energy output of buildings before awarding certification.¹² “LEED certification has never depended on actual energy use, and it's not going to.... You can use as much energy as you want and report it and keep your plaque,” says Henry Gifford, landlord with expertise on energy efficiency.¹³ LEED is strengthening its requirements, and most builders and architects agree that its standards encourage green design now as a basic part of planning for most municipal construction projects.¹⁴

However, a city might want to consider finding a way to make sure that a project is



energy efficient --- either by requiring that it obtain a certain number of LEED points for energy efficiency, or that it meet the federal government's Energy Star standard.

New York City has implemented Local Law 86, which mandates that all new municipal construction meet LEED version 3 (2009) standards. Building projects exceeding \$12 million must achieve energy use reductions totaling 20-30 percent below the state's energy code. The law features a water reduction use mandate, and requires LEED-Silver certification for city-funded buildings, with the exception of health and education facilities.¹⁵ "Green cities are quite economical....There's an initial payout, but commercial owners can turn it to their advantage with little outlay, like a power purchase agreement, where you agree to buy power from a company for 20 years if they'll install solar panels for you. You can sell excess power from renewable sources, sell it back into the grid—but can we adopt carbon cap-and-trade on a national basis? There's only so much that a specific city can do without regional and national support" says Renee Baston, chief business officer at the New York Academy of Sciences.¹⁶

In the spring of 2010, Buffalo Mayor Byron Brown announced an overhaul of the city's zoning code with implementation of the "Buffalo Green Code" set for 2012. A green building ordinance would complement that process. And since the 2010-2011 Buffalo Common Council action plan identifies "architectural plundering" as a primary concern, developing green building ordinances that address retrofitting older buildings to LEED-standards should also be part of the overall plan to green Buffalo's downtown buildings. However, as the Environmental Protection Agency notes: "Current codes and many green building standards, however, do not always provide a clear path forward on how best to redevelop and revitalize historic and other existing buildings to achieve sustainable outcomes. For example, replacement of windows and doors—key elements for an energy-efficient building envelope—often pose a challenge to those interested in preserving the historic integrity of older buildings. Communities that seek to both increase their sustainable investments and protect their historic assets must resolve standards and policies that can at times conflict, and which may render some projects financially infeasible."

Buffalo should one day be able to create with pride, as Detroit did, a Green Building Guide detailing all of its "Eco-

Buildings” along with green building resources, vendors, partners, projects, and sustainability education efforts.¹⁷ How should Buffalo envision itself today—with its architectural history intact? “One way is to look to parts of the city where you can build on the city's existing urban bones. I'm a believer in traditional urban structure ... the spine and musculature of a city. These are tenants of New Urbanism and are highlighted in three key areas to focus Detroit's future development energy: the neighborhood, the district and the corridor. Detroit needs to identify the best examples of each and make sure they work at a high level” says Doug Farr, a Detroit Native and urban architect and urban designer.¹⁸

While a comprehensive green city approach might be best and affordable for many cities, perhaps Buffalo could adopt a block-by-block or sector-by-sector approach to the construction of green municipal buildings. At the very least it should ensure its next building project is a model of what the city itself should be: a green architectural jewel set in and surrounded by its maritime

anchors: Lake Erie and the Niagara River. Buffalo should restore and broaden its vistas westward when considering green building design yet pay homage to its agrarian, industrial, and cultural heritage. If other “Rustbelt” cities are doing it, why aren't we?



1 *Summary of Government LEED Incentives*, U.S. Green Building Council, March 2009. Accessed Oct. 14, 2010, at

<http://www.usgbc.org/ShowFile.aspx?DocumentID=2021>.

2 Kara L. Richardson, “Bridgewater to Host Open House of New Green Municipal Complex,” *The Daily Journal*, Oct. 10, 2010. Accessed Oct. 13, 2010 at

<http://www.thedailyjournal.com/article/CN/20101010/NEWS/101010020/0/POLITICS/Bridgewater-to-host-open-house-of-new--green-municipal-complex>

<http://www.thedailyjournal.com/article/CN/20101010/NEWS/101010020/0/POLITICS/Bridgewater-to-host-open-house-of-new--green-municipal-complex>.

3 “Maplewood is Green,” Maplewood, New Jersey’s Environmental Action Site. Accessed Oct. 12, 2010.

<http://www.greenbiz.com/blog/2010/10/07/leed-and-future-green->

building?page=full.

4 Queens Botanical Garden website:

<http://www.queensbotanical.org/sustainable>.

5 Sewall Chan, "City's Greenest Building Opens in Queens," *New York Times*, Sept. 27, 2007. Accessed Oct. 12, 2010.

6 Daniel B. Wood, "California Adopts First Statewide Green Building Code," *Christian Science Monitor*, Jan. 15, 2010. Accessed Oct. 14, 2010, at <http://www.csmonitor.com/USA/2010/0115/California-adopts-first-statewide-green-building-code>.

7 *California Green Building Standards Code*, California Code of Regulations, Title 24, Part 11, 2008. Accessed Oct. 14, 2010, at http://www.documents.dgs.ca.gov/bsc/2009/part11_2008_calgreen_code.pdf.

8 C40 Large Cities Case Study, New York City 2007. Accessed Oct. 14, 2010, at

http://www.c40cities.org/docs/casestudies/buildings/seattle_green.pdf

9 *Id.*

10 *Id.*

11 *Id.*

12 Franklyn Cater, "Critics Say LEED Program Doesn't Fulfill Promises," National Public Radio, Sept. 8, 2010. Accessed Oct. 14, 2010, at <http://www.npr.org/templates/story/story.php?storyId=129727547>.

13 *Id.*

14 *Id.*

15 New York City Green Building Code, accessed Oct. 14, 2010, at http://www.nyc.gov/html/oec/html/green/ll86_basics.shtml

16 Joseph Dobrian, "How Green is Our City," NYInc at http://www.nyinc.com/pages/full_story/push?article-How+Green+Is+Our+City-%20&id=8948406&instance=lead_story.

Accessed Oct. 14, 2010.

17 *Detroit GreenMap*, Green Building Resource List, prepared by Detroit's GreenMap Team, November 2004. Accessed Oct. 14, 2010, at <http://www.detroitgreenmap.org/map/resource.pdf>.

18 Francis Grunow, "Doug Farr, Sustainable Urbanism Superstar," Model Media Website. Accessed Oct. 14, 2010.

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