



GREEN CITY VISION

CITY HALL

Help us transform the ill-used Boston City Hall and Plaza into a beacon of adaptive green design. We envision sustainable design for the building and the plaza. This green transformation will soften the fortress quality of the building and the barren harshness of the old plaza hardscape into a green environment to be enjoyed by all. A new Green Center of Boston will be cherished by visitors and Bostonians alike, as they explore historic downtown, shop, seek information, apply for licenses, watch performers, relax, transit, dine out, or gather for public events. The present negative impacts of the plaza on stormwater runoff, noise, urban heat island and the natural environment would also be reduced.

Within this transformed Plaza, Boston City Hall will be a shining example of a green environment, a metamorphosis from neglected Cinderella to a re-born place for our city employees and our citizens. This renewed environment will be flooded with natural daylight, will establish healthy attractive interiors that are comfortable in all seasons and will preserve the best features of the original architectural design. This will enable a transformation from concrete façades and empty cavernous spaces to walls of green plants, green roofs, solar arrays, energy efficiency and fresh air. This will save the city and taxpayers millions of dollars in maintenance and energy costs each year as well as tons of carbon. This will set an example for all the buildings in Boston.

Boston also has a tradition of leadership in the preservation and transformation of historic buildings and places. In this new century, City Hall can reclaim the trend-setting role it established when it was conceived nearly 50 years ago. We support the City in their recent efforts to shelve plans to replace this landmark. What kind of a sustainable future would we have if we abandoned or tore down all our existing buildings? What example does this provide for the next generation? Join us in remaking City Hall, and in encouraging a new ecological mantle for our city's center.

AND BEYOND CITY HALL

The Plaza and the City Hall are at the center of vital pedestrian urban spaces. This center connects Faneuil Hall and Quincy Market with the Boston Common and Public Garden to create the "Walk-to-the-Sea." By the depression of the old Central Artery, our City Center has recently become enhanced allowing City Hall direct access to its historic waterfront and Boston Harbor. Now that the Central Artery has been "greened", we are perfectly positioned to continue this evolution with the sustainable design of our open spaces, of our public monuments and buildings, and of City Hall itself. People will be drawn to visit, work and enjoy our city's new Green Center. This is an important opportunity to reduce the city's impact on our planet as we start a green transformation here, and all over the world.

GOALS & LEADERSHIP

With this Green Transformation of the existing Boston City Hall and Plaza, the City of Boston can extend its leadership role for the transition to sustainable cities and communities, and secure a better future for all Bostonians and their future generations. The new Green City Center will be a beacon for an integrated:

A. Green Economics

B. Social and Urban Environment

C. Green & Healthy Natural Environment

Boston City Hall is an internationally recognized icon of Modern Architecture, and along with its associated Plaza has been neglected over the last several decades. The greening of City Hall will set a leadership model for the City of Boston. All our buildings that need greening and retrofitting will benefit from the example developed from this process.

A. Green Economics (Boston's Community Design and Green Jobs)

We see this work as linked to fundamental Community Design concepts that are unique to Boston, which include *City Hall As an Armature to the City*, the *Transformation of City Hall Plaza*, and *The Walkway to the Sea*. The transformation of this building and plaza to a *New Ecological Demonstration Center*, will also work towards developing new Green Collar Jobs in Boston.

A comprehensive cost benefit analysis needs to be run looking at the Proposed Changes to City Hall and the Plaza as compared to the alternative Relocated City Hall as proposed by Mayor Menino out on Dry-dock #4. We are living in an era where the cost and value of buildings and commodities have risen and are due to continue rising dramatically. Oil fluctuating between \$12-24 a barrel back in 1997 is now over \$130. City Hall cost \$25 million to build in the mid 60's, and the \$35 million renovations envisioned 11 years ago will cost many times that figure today, and needs to be compared to estimates of energy savings and rental income from new real estate rental income, all in comparison to a new Building on Dry dock # 4.

B. Green Urban and Social Environment

Historical Context, Timeline. We see the importance of greening City Hall in the context of the historical timeline of the City. Boston and the center of the old Shawmut Peninsula played a special role for America where Liberty found its voice over 230 years ago. Here a town filled a marsh to create a City, and in the late 1950's, acres of the Old Boston were razed to create the new Government Center. Now it is our turn to lead Boston to the future.

C. Green and Healthy Natural Environment

Climate Change, Green Design. We are at another seminal moment in our timeline, when 40-year-old buildings like City Hall are responsible for up to 75% of the carbon emanating from our cities. This in turn

is actively melting the poles of the planet, threatening these very same cities. We believe that our Energy Study of City Hall as a key component of this New Green City Center is tied to a larger confluence of fundamental economic, social/urban, and environmental forces now being confronted across the country that are leading us to these new green solutions.

CORE TEAM

Three members of our current **Core Group of the Green City Team** have been working together for approximately 20 years, associated through various sustainable design programs in the greater Boston area co-chairing committees, conferences and courses with the Northeast Sustainable Energy Association, Boston Society of Architects, the Boston Solar Energy Association and teaching and with various local Schools of Architecture.

This Core Group of the Green City Team may grow to a manageable team of approximately 12 individuals, as the work develops and grows to require more hands, possibly drawn from the Advisory Group of the Green City Team mentioned below and the larger NESEA and BASEA communities, and in coordination with other key allies listed below. (See Building a Coalition, pg. 4).

Core Group of the Green City Team

Henry MacLean, AIA	Timeless Architecture
Franziska Amacher, Architect, LEED AP	Amacher and Associates
Gerard Ives, Architect	Ives Architects
Mark Kelley, PE	Hickory Consortium

Components of the project we are looking to support and engage with:

- * Building Shell and Exterior Design
- * Interior Design & Programming
- * Green Design/ Mechanical Systems Coordination
- * Plaza Building Interface
- * Green Design/Systems Coordination
- * Neighborhood Outreach
- * Green Roofs & Green Plaza Coordination
- * LEED for Major Renovations

We have also been working with **City Councilor Michael Flaherty**'s office since February of 2008. Councilor Flaherty has become an outspoken champion of exploring alternatives to moving Boston City Hall, and has accepted our invitation to serve as **Honorary Chair of this Green City Team**. Part of our work will include ongoing coordination with the Councilor's staff as we build an Advisory Group of the Green City Team, who can provide additional professional support for Design, Engineering and Construction data on City Hall, all with a focus to support the larger goal of greening the Boston's city center, which will be thoroughly vetted over the coming months during hearings held by Councilor Flaherty's Special Committee on City Hall.

GREENING BOSTON CITY HALL

This Green City Team traces its origins to work by two of its core members who completed a pair of Sustainable Design and Technology Courses at **Wentworth Institute of Technology** Architecture program in 1996-1997, looking at a comprehensive sustainable study of Boston City Hall. The efforts of the faculty and student work was presented to **The Chief of Basic City Services** in April of 1997, and invited back to present to **Mayor Menino's Cabinet** in the summer of 1997, and subsequently published and presented at a number of academic and professional conferences over the years since, including the Boston Globe in 1999 and Architecture Boston Magazine in 2005 and 2007.

This work was most recently included as part of an Exhibit of the Original Architectural Drawings of City Hall, by the Architects Kallmann, McKinnell and Knowles, held at Wentworth Institute in conjunction with the National AIA (American Institute of Architects) Convention in May of 2008. The Primary Design Goals and the various research teams of this 1996-97 study can be reviewed on the Boards. They were broken down in much the same way as the USGBC LEED Guidelines for New Construction and Major Renovations are now in 2008, which our Green City Team will use as a Guide, particularly given that the City has a goal for all new and Renovated Public buildings in Boston to achieve a minimum of Silver LEED certification rating, going back to November of 2004.

COALITION BUILDING

In order to achieve the stated Goals above, our Green City Team understands that we will need to work with a much larger Coalition from groups and individuals from all parts of the professional backgrounds throughout the City. As a working group of the **Northeast Sustainable Energy Association**, and its local chapter, the **Boston Solar Energy Association**, we will also be coordinating our efforts with the newly established **Citizens to Save City Hall** (chaired by **the Boston Preservation Alliance**), and the **Urban Design Committee** of the **Boston Society of Architects**.

Over the course of the coming months (and potentially years) we are poised to build with these groups and others that may emerge, a set of shared goals and **Design Guidelines** that will work to become an accepted platform of behind **Saving and Transforming Boston City Hall**. Our hope is that we will work in a synchronized fashion to meet the three accelerating forces at work in any pragmatic view of the current situation.

1. Plans for relocating Boston City Hall
2. The Public's general dislike of the Building and Plaza as they exist
3. The role Cities and Buildings are playing in Climate Change

The timeline for all of this will be determined as the City launches into a process of determining the fate of the existing Boston City Hall. We are ready to assist Counselor Flaherty in his efforts to hold **Public City Council Hearings** on a variety of platforms in the coming year.

The Following language was submitted by Councilor Flaherty on August 6, 2008 to the Boston City Council to start the process of scheduling a Hearing on Greening Boston City hall in late November of 2008.

GREENING BOSTON CITY HALL

- * Whereas, greening the current City Hall will save the city and taxpayers millions of dollars in maintenance and energy costs each year as well as tons of carbon; AND
- * Whereas greening the current City Hall and improving the air quality, as well as the use of space and feel of the building, could improve worker health and retention; AND
- * Whereas, greening the current City Hall would create opportunity to transform the entire plaza area into one that is welcoming to visitors, residents, and city employees alike; AND
- * Whereas, greening the current City Hall would create significant green collar employment opportunities; AND
- * Whereas, greening the current City Hall demonstrates Boston's commitment to green buildings and would serve as a model for other municipal and non-municipal buildings; AND
- * Whereas, greening buildings does not necessarily require tearing down old buildings and developing new buildings; AND
- * Whereas tearing down buildings to erect new ones sends a dangerous and misleading example of what is required for the city to invest in green buildings; AND
- * Whereas greening the current City Hall is consistent with Boston's tradition of preserving and transforming historic buildings; AND
- * Whereas, greening the current City Hall instead of relocating City Hall could achieve greater financial and environmental benefits to the City of Boston and its residents; NOW THEREFORE BE IT

ORDERED that a public hearing be convened by the Special Committee on City Hall and with appropriate parties to:

- 1) Consider the environmental and financial benefits to greening the current City Hall; and
- 2) Determine the feasibility of such a project.

We believe that with these hearings, the public and political landscape will shift, and the next phase of the process will allow the City to further explore in depth Sustainable Design studies in the integrated design, engineering and building professions. This work will identify the most appropriate Green and Integrated Design Guidelines and Recommendations that this specific building has to offer.

We also believe that this Coalition will be a useful agent over the coming years for the City leading up to a Public Request for Proposals /Contest to Green and Transform Boston City Hall.

DESIGN GUIDELINES & RECOMMENDATIONS
for a GREEN CITY VISION

A. **Energy consumption reduction** through heat recovery ventilation via the atria. Envelope improvements, green roofs, localized personalized conditioning and improved day lighting from opened up floor plates in atria.

B. **More openness and accessibility** of the building through program changes. Adding commercial spaces to City Hall on Congress Street side. Increasing transparency through building by adding openings in exterior walls and through circulation paths from Congress Street to the upper plaza.

C. **Recycling and sensitively adding on to the existing armature** using the mass of the building to store energy, green roofs, water, materials, energy, air and place reuse.

D. **Carbon neutral explorations & improved space efficiency** by adding upwards of an additional 100,000 square foot of usable and leasable space within City hall. This step of enclosing open spaces can significantly reduce the Carbon footprint of the building, which along with purchased green power and some new renewable energy sources on site, will allow City Hall to work towards becoming a Carbon Neutral Building.

E. **Improved workspaces with connection to light and nature** through opening up spaces by redesign, and possible expansion on a number of floors.

F. **Improved worker health and retention** by improving the overall performance of the building, the interior air quality, the feel of the building and uses of spaces that can foster a sense of pride and health for City Hall employees, residents of Boston, and a sign of our pride in the City those who visit Boston.

G. **Improved circulation systems** with much clearer paths informing people where they are and how to use the building as a workplace and as a Civic center, simultaneously.

In addition to these Design Recommendations/Guidelines, we have attached the following **Seeds for Saving City Hall** which will be especially useful in the next phase of the process, as the people of Boston and the various neighborhoods are brought up to speed on what options and opportunities rest with this endeavor to Green Boston City Hall. These Talking Points will be the catalyst in bringing the public onboard. However this will not happen actively until when Counselor Flaherty announces this new study in the fall of 2008.

The focus of our Green City Team from now (July 1) until September and beyond, will be to build the base Advisory Teams, focus on the tasks outlined under our goals above, & prepare our data for possible testimony in a coordinated fashion with the larger Coalition forming as we look to swing the City, the Mayor and the BRA towards Greening and Saving the people's building, Boston City Hall.

SEEDS OF SAVING CITY HALL

Can we continue to be leaders?

Other cities have wonderful green civic buildings, for example the renovated Chicago City Hall.

Instead of abandoning a building in the heart of the city, we want to renew City Hall so it will become a model for all our buildings, and lead the way to sustainable building in Boston.

City Hall will become a green center for the community that will drive the creation of green jobs in a local green economy.

1. **Preservation:** 95% or our buildings will be here in 2050. We need models of reusing existing buildings.
2. **Reuse Our Buildings:** Boston has known how to adapt and reuse existing buildings and as a result has a heritage of beautiful building stock all over the city. That is a great tradition worth continuing.
3. **Wasted Energy:** We are squandering the wealth of our city by wasting energy every day. By making City Hall sustainable, we can save as much as \$2 million a year or more....
4. **Energy Independence:** A great step towards energy independence: internal efficiencies, reduced consumption, renewable resources, etc.
5. **Public Health:** Reduced energy consumption means reduced pollution. Parts of Boston have been ranked 4th worst nationally for asthma.
6. **Labor Costs:** Green Buildings have proven to reduce absenteeism by 15 to 40%; and substantially reduce expensive employee turnover.
7. **Green Systems:** Green mechanical systems throughout building will result in large savings.
8. **Civic Pride and Participation:** Involved citizens can green City Hall in a collaborative effort.
9. **Destination of Choice:** City Hall can become inviting, accessible, and appealing to the public.
10. **Green Attraction:** City Hall can become attractive and healthy through the introduction of natural features of greenery, waterfalls, and increased access to daylight and views of nature.
11. **Stop Squandering Resources:** Reduce costs for energy, water and sewer, storm water, and recycling.
12. **Avoid Waste:** Reduce demolition waste.
13. **Accessibility:** An excellent public transportation network surrounds this centrally located site.
14. **Keep the Balance:** Our government center is a TRIPOD consisting of the federal, state and city government. Do not pull out one of the legs!
15. **Green Buildings:** Green buildings improve indoor air quality, increase natural light, and provide more views of nature.
16. **Green Jobs:** Green construction creates jobs and reduces workers' health problems.