

Philip Silva
597 Grand Avenue, #3E
Brooklyn, NY 11238
(M) 973.818.5822 | (E) philip.silva@gmail.com

CURRICULUM VITAE

EDUCATION

Milano The New School for Management & Urban Policy, The New School, NY

M.S. in Urban Policy Analysis & Management (2006)

Professional Decision Report: "A Commitment to Campus Sustainability: The Costs and Benefits of Green Design for a Signature Building at 65 5th Avenue."

Advisor: Dr. Robert Beauregard

Eugene Lang College The New School For Liberal Arts, The New School, NY

B.A. in Liberal Arts, Concentration in Urban Studies (2004)

TEACHING EXPERIENCE

Eugene Lang College The New School for Liberal Arts, The New School, NY

Urban Forestry (Fall 2009 to present)

Natural History of New York City (Spring 2009 to present)

Brooklyn Botanic Garden, NY

Organizing for Community Greening (Fall 2009 to present)

Street Tree Stewardship (Fall 2009 to present)

PROFESSIONAL EXPERIENCE

Brooklyn Botanic Garden: GreenBridge, NY

Program Manager

September 2009 – present

- Design and manage the Brooklyn Urban Gardener adult learning / popular education program
- Manage annual Greenest Block in Brooklyn competition, featuring over 250 participating groups
- Develop and manage annual Making Brooklyn Bloom conference on community horticulture
- Write, edit, and publish GreenBridge publications, including a bi-annual educational newsletter
- Develop and maintain strategic partnerships with local environmental advocacy groups.

The New School, NY

Assistant Director for Operations and Sustainability

June 2008 – September 2009

- Developed metrics, benchmarks, and goals for a university-wide Campus Sustainability implementation plan
- Researched and implement the use of environmentally advanced products, materials, and services
- Administered all purchasing and contracting for the Department of Facilities Management
- Ensured compliance with local, state, and federal environmental regulations for hazardous waste and emissions

Sustainable South Bronx / Southern Bronx River Watershed Alliance, NY

South Bronx Greenway Coordinator / Sheridan Campaign Coordinator

June 2007 – June 2008

- Managed the public relations, outreach, and policy campaign to replace the Sheridan Expressway with 900 units of affordable housing, open space, and new economic development opportunities
- Updated and implemented the Hunts Point Urban Forestry Plan through large-scale street tree planting, stewardship mapping, and citizen engagement in the urban environment
- Strategically coordinated city agencies, landscape architects, philanthropic organizations, and partnering non-profits for the design and construction of South Bronx Greenway
- Fundraising and development for all related programs

Office of the NYC Public Advocate, NY

Policy Analyst

January 2007 – June 2007

- Developed the Office's policy positions on land use, economic development, environmental, and transportation issues
- Exposed failures in government service provision through investigative reports and outreach and wrote investigative reports on topics related to environment and economic development

e⁴ inc, NY

Associate Green Building Consultant

June 2006 – January 2007

- Managed LEED documentation and certification for large commercial and residential developments such as One Bryant Park, Atlantic Yards, and the Brooklyn Navy Yards
- Researched and advised clients on the implementation of green building technologies and materials

Leader Newspapers, NJ

Staff Reporter

August 2004 – January 2005

Assistant Editor and Staff Reporter

May 2002 – September 2002

- Wrote multiple front-page stories covering issues of ecological restoration, environmental policy, urban redevelopment, regional policy and politics;
- Copy-edited, checked facts, and oversaw weekly production process

PROFESSIONAL SERVICE

TreeKIT, NY

Co-Founder & Board Chair

September 2008 – present

- Develop a web-based map and database of NYC street trees to facilitate volunteer environmental stewardship
- Create and implement field-based mapping protocols for locating trees with volunteer groups;
- Cultivate and manage partnerships with community based environmental organizations to build street tree maps

Prospect Heights Community Farm, NY

Board Treasurer

March 2007 – present

- Manage the annual budget of a mid-scale community garden with over 100 annual members
- Direct special projects, including large-scale tree pruning and composting
- Develop street tree stewardship initiatives in Prospect Heights

SELECTED PUBLICATIONS

Twelve for 2030: Response to PlaNYC: A Greener, Greater New York. Office of the NYC Public Advocate, 2007. Co-written.

21st Century Learning: Career and Technical Education Prepares New York City Students for Future Success. Office of the NYC Public Advocate, 2007. Co-written.

Scientists Gather at NJMC to Study Rising Sea Levels. Leader Newspapers, 2007.

Dirty Water: Who Should Pay? Leader Newspapers, 2004.

Meadowlands Could Be Deemed National Refuge. Leader Newspapers, 2003.

Borough Gets \$1 Million For Garbage Dump. Leader Newspapers, 2001.

Raucous Start to Mall Hearings. Leader Newspapers, 2001.

AWARDS AND FELLOWSHIPS

iLAB Residency for Stewardance Collaboration, iLAND, 2010.

Michael Kalil Memorial Fellowship Award Winner, Parsons The New School For Design, 2010.

Environmental Leadership Program Fellow, Environmental Leadership Program, 2009.

Best Professional Decision Report for “A Commitment to Campus Sustainability: The Costs and Benefits of Green Design for a Signature Building at 65 5th Avenue.” 2006.

PROFESSIONAL TRAINING & OTHER QUALIFICATIONS

Citizen Pruner Certificate, Trees New York, 2007

Certificate in Dialogue Education Training, Global Learning Partners, 2010.

Fluency in Portuguese

Mac/PC, Microsoft Office Suite, Adobe Design Software Fluency

a commitment to campus sustainability

The Costs and Benefits of Green Design for a
Signature Building at 65 5th Avenue

**Milano The New School For
Management and Urban Policy**

Produced for The New School by Philip Silva

December 2006

Executive Summary

Recommendation: The New School should strive to design and construct a new building at 65 5th Avenue worthy of achieving a “Gold” rating from the US Green Building Council’s “LEED” rating system.

The New School was founded in 1917 as a small social science research institute housed in a row of brownstones on 23rd Street in New York City. Within ten years, the school had outgrown its modest campus and was forced to find a new home to accommodate its expansion. Alvin Johnson, the president of the New School at the time, saw the relocation as an opportunity to demonstrate the New School’s modern, progressive ideals through architecture. The result was a 9-story building at 12th Street and 6th Avenue that would come to be known as one of the first examples of the “International Style” of architecture in New York City.

Today the New School is facing many of the same challenges it faced nearly a century ago. The university’s educational mission is expanding and its student population is rapidly growing. In order to meet the need for new space, university leaders have decided to redevelop the Albert List Academic Center at 65 5th Avenue into a new, 500,000 gross square foot building that will house a wide variety of university activities. Just as Alvin Johnson’s building demonstrated the New School’s socially progressive values in the 1920’s, the new building at 65 5th Avenue will be designed to express the university’s increasing commitment to ecological sustainability.

Sustainable, or “green,” architecture aims to reduce a building’s negative impacts and increase a building’s positive impacts on the environment. Architects, engineers, and builders work together to holistically design all of a building’s structures and systems in order to achieve sustainability. Without holistic design, a building’s systems may not achieve the synergies necessary to increase energy efficiency, reduce water consumption, and eliminate the use of toxic or non-renewable materials. Holistic design is, therefore, integral to the construction of a green building.

This report analyzes the costs and benefits associated with achieving different levels of sustainability in a new building at 65 5th Avenue. Since every building is designed to meet the unique challenges of site, program, and budget, it is difficult to compare green buildings in order to judge their relative “greenness.” The US Green Building Council’s Leadership in Energy and Environmental Design (“LEED”) rating system provides analysts with the ability to categorize different green buildings and rate them according to their achievements in sustainable design. This report relies on the LEED rating system to analyze the costs and benefits of different levels of green design for the New School’s new building.

Buildings rated according to the LEED system are assigned points for design features, investments in technology, and other attributes that collectively make up the repertoire of green archi-

ecture. The more points a building collects, the higher its LEED score. The four LEED ratings are:

| | |
|----------------|-------------------|
| LEED Certified | (26 to 32 points) |
| LEED Silver | (33 to 38 points) |
| LEED Gold | (39 to 41 points) |
| LEED Platinum | (52 to 69 points) |

The lowest, “Certified,” level represents a minimum investment in basic green design, and is not commensurate with the New School’s ambition to use its new building as a demonstration of innovative sustainable architecture. Only seven buildings worldwide have achieved the highest “Platinum” level – few of them in an urban setting and most of them at a significant added cost. Therefore this report focuses solely on a comparison of the costs and benefits associated with buildings at the LEED Silver and LEED Gold levels.

In order to compare the costs and benefits of achieving a LEED Silver or LEED Gold rating at 65 5th Avenue, this report considers the impact that either rating would have on the following five indicators:

Financial Costs: How much extra money would it cost to design and build a building certified at each LEED rating level?

Financial Benefits: How much money would a building certified at each LEED rating level save or generate over time?

Public Relations, Fundraising, and Student Recruitment: To what degree will a building certified at each LEED level have a positive impact on the New School’s PR, development, and admissions initiatives?

Educational Goals: To what degree will a building certified at each LEED level help to reinforce and supplement the New School’s educational goals, particularly in the area of environmental studies?

Environmental Impact: To what degree would a building certified at each LEED level have a reduced negative impact on the environment? To what degree would each level have a positive impact on the environment?

On average, a LEED Silver building will cost an extra \$1.50 per square foot to design and build. A LEED Gold building will cost an extra \$3.00 per square foot. Evidence suggests that these costs can be significantly reduced if:

- A developer makes an early commitment to green design in the building process;
- A developer hires an architect with solid green design experience;
- The design and construction team works as a deeply integrated whole; and
- The building is designed holistically

The average financial benefits of green design for buildings at all LEED levels are worth about \$14.80 per square foot in today’s dollars (based on a 20 year analysis of accumulated benefits).

Though analysts have yet to parse out the total average financial benefits of LEED Silver versus LEED Gold, there is evidence to suggest that Gold buildings will achieve greater savings in energy and water use and will have lower operation and maintenance costs over time.

Buildings achieving a LEED Gold rating will typically provide a better learning environment than those rated LEED Silver. In order to achieve the higher rating, buildings are more likely to feature design and technology innovations that allow more sunlight and cleaner air into interior spaces. Yet there is little evidence to prove that buildings at either level are used more or less effectively in university settings as educational tools.

The public relations, development, and recruitment benefits resulting from a building rated LEED Silver are not likely to be much different from those resulting from a building rated LEED Gold. There seems to be little understanding of the differences between LEED ratings amongst the general public, and many developers have been able to garner significant public interest with buildings at even the lowest LEED levels. Yet it is clear that investing in a green building at any level can lead to improved public relations.

Finally, there is some disagreement amongst green architects over whether a LEED Gold building will have a better relationship with the environment than a LEED silver building. Different buildings can earn different LEED rating points for different design features – some of them more or less significant when it comes to improving a building's environmental impact. Yet, overall, it is safe to assume that LEED Gold buildings will simply feature greater investments in achieving sustainability than LEED Silver buildings, making them the more environmentally friendly option.

Based on these comparisons, the New School should strive to design and construct a new building worthy of achieving a LEED Gold rating. Hiring Skidmore, Owings, and Merrill, LLC, ensures that architects and engineers experienced in green design will help reduce building costs. In order to reduce costs and maximize the potential benefits of a LEED Gold building, the university should also:

- Ensure that the building is designed to flexibly adapt to changing needs;
- Involve the New School community – faculty, staff, and students – in the building's design and construction in order to ensure that it meets occupant needs and to provide unique educational opportunities in green architecture;
- Develop a marketing strategy that points out the merits of a LEED Gold rating; and
- Apply for government subsidies to offset the costs of increased capital spending.

Finally, the New School should take advantage of its green building project to jumpstart a broader conversation about campus sustainability. The new building can be the leverage point that helps the university galvanize support for a campus-wide policy on sustainability.