

## SUSTAINABLE URBAN PRESERVATION DEVELOPING A MODEL PROGRAM FOR NEW YORK



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COVER PHOTOS: Work in progress at the Father Francis Duffy Memorial in Times Square, one of three local monuments where the Times Square Business Improvement District (B.I.D.) implemented a 1997 summer high school training program. (credits: top and right, Philip Greenberg, Times Square B.I.D.; bottom, A. Ottavino Corp.)

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This report takes as its point of departure the symposium "Employment Strategies for the Restoration Arts: Craft Training in the Service of Historic Preservation," organized by the World Monuments Fund from July 26–28, 1993. Through site visits, presentations of case studies and roundtable discussions, the symposium examined how individuals in the United States, particularly youth and displaced workers, might be trained and provided jobs in the restoration arts. Seventy-five professionals participated, representing the interests of historic preservation, craft training, art conservation, architecture and landscape architecture, community development, local and state government agencies, and foundations.

Coinciding auspiciously with renewed federal government interest in education and job training, the conference addressed WMF's concern about the absence of nationwide standards for the craft skills used in historic preservation and the limited number of existing U.S. programs to train people in the highly specialized skills that contributed to building our rich architectural legacy and now are needed to maintain it. With money and interest flocking to high technology and white collar training, opportunities to create rewarding jobs in vocational trades such as the restoration crafts have been ignored. The preservation community has demonstrated that preserving historic fabric revitalizes communities. At the same time, the increasing successes of the U.S. preservation movement have led to the designation and protection of historic districts, creating a need for skilled restorers. However, there has been a lag in training the craftsmen capable of such work.

In 1993, WMF participated in a pilot youth training program at the Church of St. Ann and the Holy Trinity, a national historic landmark church in the Brooklyn Heights Historic District. Conducted with The Pratt Partnership and The St. Ann Center for Restoration and the Arts—a model conservation program that WMF had supported since 1988—the project involved 28 Summer Youth Employment

Program interns (ages 14–21) from central Brooklyn in the crafts of blacksmithing, masonry, stained glass restoration, and wood conservation. Along with high ratings from the New York City Department of Employment and the New York State Department of Labor, this on-site youth training program attracted favorable community attention and coverage in the city's print and broadcast media.

WMF's experience with the symposium and training program confirmed the overwhelming need in this country to broaden opportunities for youth and stem the loss of disappearing craft traditions.

Following the symposium WMF organized a series of roundtable discussions with key symposium participants from city agencies—the Art Commission, Department of General Services, Landmarks Preservation Commission, Department of Transportation, and Department of Parks—as well as industry, in order to maintain the dialogue established by the symposium. The time was ripe for assessing the economic benefits and potential for public-private partnership in a historic preservation framework. WMF felt that historic preservation merited the application of the environmental movement's demonstration of "sustainable development"—meeting current needs without compromising those of future generations. In the summer of 1994, WMF submitted a proposal to the Rockefeller Brothers Fund to support a study on the economic impact of restoration craft training and evaluation of the net benefits of historic preservation on the New York community. This study would be central to defining the organization's future participation in developing a craft training curriculum that would train competent workers whose course work would be organized around specific New York City landmarks. It was hoped that the study would define a range of options for WMF's participation in craft training, which would undoubtedly benefit from a partnership with one or more of the city agencies that had, as an outcome of

the symposium, indicated its willingness to be involved in this area.

**W**MF assembled a consultant research team. Conservator Kate Burns Ottavino, vice-president of A. Ottavino Corporation and director of Preservation Technology at the Center for Architecture and Building Science at the New Jersey Institute of Technology, developed plans for a craft-training curriculum model that would take into consideration criteria, standards, and procedures, including a formal restoration crafts conservation apprenticeship program. To define "urban sustainability" as it applies to the built environment and discuss its economic and social benefits, WMF sought the assistance of Tara-Shelomith Krause, who had worked as a research assistant to professor Thomas N. Gladwin at the Stern School of Business (New York University), who is influential in the study of socially responsible and environmentally sustainable business practice. Krause suggesting sharing her portion of the project with Patricia Bransford, with whom she had recently worked in developing the Urban Technology Center, an enterprise backed by the U.S. Department of Commerce and several corporate foundations to develop information technology resources in the inner city.

Rebecca Anderson, then WMF's Program Administrator, supervised the project, convening four milestone meetings to review progress and exchange ideas with executive director Bonnie Burnham and director of programs John Stubbs. Two special meetings were held. Jon Canham, director of the Institute for Preservation Training gave a presentation on his ambitious new program based in Newport, Rhode Island. Ottavino's research into the model developed by the Pratt Institute led her to John Talmadge, Chief of Staff to Kenneth Fisher of the 33rd Councilmanic District in Brooklyn. Council member Fisher had been a symposium participant and early proponent for the idea of a high

school devoted to the restoration arts.

Ms. Anderson has assumed responsibility for seeing the report to completion. David Sassoon, who served as the rapporteur for "Employment Strategies for the Restoration Arts," edited the contributions into one cogent manuscript. The World Monuments Fund extends its warmest thanks to the many friends and colleagues who have helped to inspire as well as add their enthusiastic voices to the dialogue reflected in this document. We believe it continues to represent a fertile opportunity for the field.

# URBAN PRESERVATION: A CATALYST FOR SUSTAINABLE DEVELOPMENT

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WE WILL TRANSMIT THE CITY GREATER,  
BETTER AND MORE BEAUTIFUL THAN WE  
RECEIVED IT.

– *Oath taken by citizens of ancient Athens*

The preservation community is currently endeavoring to develop a cogent argument by which it can broaden its constituency and continue its work. Up until recently, the justification for preservation has had an elitist bias, focussed mainly around aesthetic and historic considerations, with limited regard for economic and social concerns.

Preservationists have tended to focus on physical structures rather than capitalizing on the opportunity to use their preservation work as a catalyst for community renewal.

With the recent emergence and elaboration of the concept of sustainable development, we have been given an opportunity to recast the preservationist ethic, to craft a more compelling argument to attract moral and material support from the public, from government and from private institutions. Shown in the light of sustainable development, urban preservation acquires the social and economic justification that it has traditionally lacked and breaks free from its historically isolated position to join a broader stream of progressive concern.

How can the potential of urban preservation to act as a catalyst of sustainable development be realized? The beginning of an answer becomes apparent if we follow the thinking of James Marston Fitch and regard "heritage" as a non-renewable resource. The built environment then can suddenly be seen to possess additional dimensions of value previously invisible to our thinking;

and it becomes an act of paramount foolishness and arrogance to squander or destroy the resource, in the same way that doing damage to our planetary ecosystems is such an act. Just as we cannot manufacture Mother Nature's soil, water, and air which provide the basic ground of our animal survival; so we cannot fabricate the substance, the spirit, and the inspiration of our heritage which defines us as human and social beings.

Sustainable development is a term that became part of the global vocabulary in 1987 with the release of The Brundtland Report by the World Commission on Environment and Development. In simplest terms, the report sought to endorse a new kind of economic thinking it called "sustainable development." Instead of taking growth or profitability to be the primary goal of productive activity, sustainable development adopts a larger standard of reference and suggests a different measure of success: "Meeting the needs of the present without compromising the ability of future generations to meet their own needs."

The notion of sustainable development was formally adopted and endorsed by world leaders, national governments (including the United States), as well as private and public institutions involved in promoting economic and social development. At the same time, this idea has been richly elaborated in academic and professional literature. Economists, futurists, environmentalists and other kinds of thinkers have proposed many analytical models and created new tools of measurement in order to quantify resources—many of them heretofore ignored—and calculate costs and benefits according to this new standard of value. (Please see bibliography.)



For the purposes of this discussion, we will adopt an analytical framework based upon the idea that there exist four fundamental "capital stocks"—social capital, human capital, material capital, and natural capital. The assumption we make is that these capital stocks must be sustained, protected, and allowed to circulate in order for communities and the larger social order to remain healthy. The last section of this paper considers these interpenetrating capital stocks as they relate to the activity of urban preservation. Before turning to this model, still in need of greater elaboration and refinement, let us consider the question of sustainable urban preservation in the context of New York City.

#### NEW YORK: A LOOK AT A MEGA-CITY

New York City may provide a well-equipped laboratory for an experiment in sustainable urban preservation, but let us not underestimate the challenge. It is suffering from the steady erosion of its historic fabric, the loss of craft skills that produced the architectural legacy of the city, and a continuing disintegration of its social fabric. We can gain insight into its present condition if we examine it both as an entity unto itself as well as part of a global system. In the latter context, New York is part of what has come to be called the "mega-city" phenomenon.

A mega-city is defined as an urban area with more than 4 million inhabitants. In 1950, there was only one—Buenos Aires. Today, 42 percent of the world's population resides in 23 mega-cities, growing at an average annual rate of 3–4 percent. New York is one of them.

Four other mega-cities are located in the developed countries of the North:

London, Los Angeles, Moscow and Tokyo. Eighteen are located in the developing countries of the South: Bangkok, Beijing, Bombay, Buenos Aires, Cairo, Calcutta, Dacca, Delhi, Jakarta, Karachi, Lagos, Manila, Mexico City, Rio de Janeiro, São Paulo, Seoul, Shanghai and Tianjin.

By 2000, now only three years away, experts predict there will be 76 cities with more than 4 million inhabitants—3.2 billion people living in mega-cities. By the year 2025, it is estimated that 59 percent of the world's people will live in these cities. Abandoning these monoliths is not an option.

Today the mega-cities of the world face the same challenges: inner city infrastructure decline, escalating air and water pollution, seemingly intractable urban poverty, crime, drug abuse, and violence. New York is no exception.

How can programs of sustainable urban preservation help in meeting some of New York's mega-city challenges? In one area studied on a large scale—job distribution—we can see how such programs might help.

According to a 1992 Regional Plan Association (RPA) study, the majority of jobs in the metropolitan region require white collar skills. Sixty percent of the employment or 6.4 million positions in 1986 were filled by managers, professionals, technicians, sales, and other administrative support workers. Blue collar occupations comprised only 25 percent of the employment, or 2.7 million jobs. Service skills accounted for the remaining 15 percent with 1.7 million jobs. Secretarial and general office workers represented the largest occupational category with 1.4 million jobs, followed by data processing, office commu-

nications, and managers. The RPA projected employment to grow by 1.6 million jobs in the region from 1986 to 2000. White collar work is to provide 72 percent of this gain, service employment 25 percent and blue collar activity only 3 percent. Beyond 2000 the study concluded that there will be no requirement for additional blue collar skills.

This does not bode well for our architectural fabric nor for the heterogeneity of our city, but if we put into place a significant effort to rebuild communities around their heritage, we might not see blue-collar work atrophy in the next decade, and with it our skill to preserve our heritage.

New York City has 63 historic districts containing 1,000 landmarks and 20,000 properties, representing 2 percent of all building lots. This aspect of New York's heritage, this non-renewable resource, might indeed provide a source of catalytic action sufficient to help propel the metropolis out of present patterns of disintegration into the 21st century.

### COMMUNITY PROTECTION IN AFRICAN-AMERICAN NEIGHBORHOODS

Still, global solutions alone will not work. There is a need, as the popular slogan says, to "think globally, act locally," for it is understood that sustainability will emerge only out of community. African-Americans have already made a large contribution to preservation by putting this idea into practice, even though they have only begun to achieve recognition from the mainstream historic preservation movement. Since the 1970s when activists looked at slums in Brooklyn and Cincinnati and saw historic sites, the African-American community's leaders,

architects and historians had already been active in the pursuit of preservation. They understood that the loss of cultural survival mechanisms results in an erosion of community values, a growing sense of powerlessness and a lack of identity and pride. In these communities preservation has been viewed and promoted as a form of community identity worthy of protection, and community leaders have adopted this premise as a broader mandate so that preservation includes "people renewal."

The Abyssinian Baptist Church in Harlem and its subsidiary Abyssinian Development Corporation have built housing units for the homeless, for senior citizens and for moderate income people, renovated historic sites within the community, and launched educational initiatives. The organization was active in the renovation of the Renaissance Ballroom which had stood vacant for 14 years. It also restored the 28 town houses on Astor Row by attracting a \$700,000 grant from the Astor Foundation.

Many foundations have been slow to understand the connection between historic preservation and community development, but the executive director of the Astor foundation commented that poor communities all over the United States have fine architecture that, if restored, could both instill pride and create jobs.

Even though we can point to other examples of similar successes in other neighborhoods around the country, thinking like this is still more the exception than the rule. Volunteer networks have only just begun to cross racial lines, and few African-Americans participate in the traditional preservation movement; and it is precisely in their neighborhoods and those of other minorities that the need may be greatest.

Instead of remedial government programs that target the most distasteful and politically embarrassing symptoms of mega-city crisis, we may be ready now to consider much broader-based experiments in urban preservation and sustainable development.

#### A MODEL FOR JUSTIFYING SUSTAINABLE URBAN PRESERVATION

One way to begin to make urban preservation relevant in the context of sustainable development is to analyze the impact that urban preservation would have compared with new building and development. Which option proves to be the sustainable one? Which option allows us to “meet the needs of the present without compromising the ability of future generations to meet their own needs”?

Let us examine here the impact of these two options on the social, human, material, and natural capital of New York City. Which creates greater economic savings? Which brings with it greater additional benefits to enhance social cohesion? The following brief discussion is intended to provoke an interdisciplinary effort to reconceptualize our thinking, find new ways of looking at urban problems, spur dialogue, and build a new consensus.

#### *Social Capital*

The notion of “social capital” is the most abstract of the four capital stocks and the most difficult to quantify, yet perhaps the most important. If community members preserve a sense of identity connected to the place in which they live, they will be able to meet the constant challenges posed by mega-city pressures with a positive sense of possibility and pride in achievement.

This intangible sense of social cohesion based around shared ethical values is a capital stock of tremendous potency and volatility. Harnessed properly, it leads to sustainability and the highest achievements of civilized capacity. By way of example, we could argue that ancient Athens, Rome in its glory or Florence during the Renaissance had a stock of social capital unparalleled in the western world. Yet, obversely, if social capital cannot be preserved, its energy is dissipated in explosions and declines so rapid that all hope is lost; communities become maimed, crippled and ruled by cynicism, despair, and violence.

How much stock does New York City possess of social capital? Contradictory images and thoughts immediately come to mind, but if one poll is to be believed, overall the stock is quite substantial: only 7 percent of New York residents cite a sense of community as a problem. Inner city neighborhoods have traditionally been and will continue into the future as the first destination for new immigrant groups, who bring with them shared cultural and social values. The challenge becomes how to improve the quality of life and ensure social equity, a healthy environment and economic opportunity so that this capital is not drained.

Evidence shows that the benefits of historic preservation succeed in instilling civic pride and creating a social confidence, and so helps to preserve social capital. With urban preservation, for example, comes tourism and the material and psychological benefits of living in communities admired by visitors from afar. Similarly, studies in more than a dozen cities around the nation have shown that property values benefit from urban preservation. With preservation also comes an improved quality of life stemming from the strengthening of community



values. An involved 24-hour neighborhood, for example, reduces crime, vandalism and littering, and attracts new business.

By contrast, new building can have the opposite effect. For example, consider an inner city strip shopping center. It has to spend \$2 more per square foot than a comparable suburban shopping center for full-time security guard, increased lighting, and continuous cleaning. Total operating costs as a result rise by 15 percent.

On a larger scale, entire communities can be destroyed by new building precisely because the notion of the existence of a stock of social capital is not recognized. In 1994, there were plans afoot to demolish the 124 buildings of the Nehemiah Project in East New York. A *New York Newsday* editorial by Roberta Brandes Gratz, author of *The Living City* and president of the Eldridge Street Project in New York, criticized the proposed demolition and made an appeal to preserve the social capital that would otherwise be wasted:

*"Housing alone does not make a neighborhood and it is a moral outrage to throw out people with long social ties to the community, people who struggled against drugs and crime, long-term owners who could not get mortgages during the hard times, who were red-lined out of loans to improve the area but who stayed and worked hard against deterioration, always with the faith that things would get better. Many poor people here with what are traditionally defined as middle-class values are being shoved out to make way for moderate-income homeowners. This displacement is rationalized by pretending that poor people can't con-*

*tribute to neighborhood stability, and want to leave anyway at the first opportunity.*

*The traditional New York neighborhood model is being emulated everywhere except in our own backyard. Can't we learn from ourselves?"*

### *Human Capital*

One problem that continues to vex politicians and social workers responsible for addressing the problems of this nation's inner cities is unemployment, particularly among youth. Job programs historically have in general not proved successful. For example, many federally funded federal job programs spend between \$2000 to \$4000 per person and last two to three months. As one youth skills training leader commented once, "With \$2000 you can just get them dressed up and sent to a job interview." Job training requires a long term investment, and for this reason, urban preservation projects can provide the context for job training and increase a community's stock of human capital.

According to the New York City Parks Department (Rabinowitz, 1994), there are no current programs in the New York City university art school system for preservation and art conservation. Few people are trained in the artisan skills of stone-cutting and mold-making. In short, many restoration architects are forced to specify replacement materials and techniques or abandon plans for preservation because "you can't get that kind of work anymore."

Studies have shown that job creation is stronger in preservation work than in new construction, as preservation work is more labor intensive. Further, the Lower Manhattan Task Force calculated the bene-



fits of jobs retained through its preservation efforts. Experts calculated that 3000 jobs will be retained by the Lower Manhattan preservation effort with each job having a net present value of \$115,367. In addition, preservation creates five more construction jobs and three more permanent jobs than new construction for every \$1 million invested. (The City of New York, Lower Manhattan Task Force, 1994)

The principles of social cost accounting can be used to calculate the benefit of training one craftsperson. Assume a 19-year-old unemployed youth living in public housing and receiving approximately \$7,000 in total public assistance. He enters a preservation craftsperson skills training program at \$10 per hour. Upon completion of the program, he becomes an apprentice at \$25,000 annual salary with benefits. Using actuarial computations, the societal income for one trained craftsperson turns out to be \$397,089.

These kinds of facts argue strongly in favor of a craftsperson training program targeting disadvantaged minority youth and workers in need of skills retraining, as an adjunct of sustainable preservation programs. (See essay, following). Programs of this sort would entail marshalling a diverse coalition of support to provide the necessary leadership, commitment, and financing: business, both large and small; community development groups, local government, educational institutions, and unions. Necessary components include comprehensive social service support, ties to formal educational institutions and community groups, and a sympathetic and active apprenticeship program.

While easily described in the abstract, such programs need to be more fully articulated and brokered through the maze of city pol-

itics and bureaucracy and supported by private enterprise. Just as there is an unused resource in the heritage of New York City, so there is a needy base of human capital in the city that could be strengthened through training by and service to programs of sustainable urban preservation.

### *Material Capital*

Nationwide studies show that development is consistently steady in historic districts in terms of work permit applications; and in Denver's historic preservation area, 114 new businesses were created with 450 new jobs despite a severe recession.

One reason that urban preservation can bring positive economic development is because it preserves material capital. This is most clearly seen in savings on energy and landfill costs, as well as the reduced need for materials demanded by wholly new construction.

The City of New York Lower Manhattan Task Force analyzed energy cost savings, and was able to justify the following incentive: if a building owner improved his building at least 20 percent of the current assess value, the city could offer a 30 percent reduction in electricity costs and 20 percent of natural gas costs over 12 years.

Landfill space is quickly running out in New York City, requiring a major solid waste management system transformation. Studies during the late 1980s found that construction waste accounted for 30 percent to 50 percent of the solid waste in urban landfills, and that rehabilitation generates approximately 67 percent less solid waste than new construction.

Urban preservation can achieve substantial savings for the municipal solid waste man-

agement budget as well. If 30 percent of new construction is replaced by rehabilitation, the generation of more than 417,000 tons of waste will be avoided, saving the city more than \$30 million.

Preservation efforts—as distinct from rehabilitation—might generate even less solid waste and require even less in the way of new materials and energy consumption.

### *Natural Capital*

Urban preservation allows the built environment to remain and helps protect existing natural capital. Zoning plays an important role in the sustainability of a city. Zoning incentives that do not favor the preservation of the city built environment spur demolition and the sprawl of new development. Limits to neighborhood growth and the inclusion of greenways provide an impetus for human scale development that preserves wet lands, curbs automobile traffic, and does not overburden infrastructure.

Furthermore, research conducted over the last twenty years shows that rehabilitation work typically puts less of a burden on water and sewage infrastructure than new development. This translates into a cleaner environment while simultaneously providing open space for inhabitants. It is important to note that these factors also strongly influence perceptions of regional competitiveness.

### CONCLUSION

Most supporters of sustainable development have no background in historic preservation but nevertheless are motivated to create environmentally compatible and more livable communities. Historic preservationists are seeking to preserve urban heritage. The challenge lies in seeing the cogent intersection of both movements. Urban preservation can become a catalyst for crafting a sustainable future from the nonrenewable resource of urban heritage. Environmental conservation together with strong social-equity arguments makes a cogent combination through which to enlarge the constituency for making a new kind of sustainable urban investment.

## TOWARD A SUSTAINABLE MODEL OF RESTORATION ARTS TRAINING

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Since the end of World War II, this nation has witnessed a substantial decline in traditional building craft skills. Because the building industry has come to rely more and more on prefabricated materials as well as compounds and processes created out of technological and chemical advances, the crafts that had for centuries provided the mainstay of the building trades have fallen out of demand and use. While more modern journeymen—laborers are equipped with the new skills demanded by the marketplace, even the knowledge and ability to restore the structures built even at the turn of the century we are now closing has seriously been eroded.

To make up for the loss, there have been and continue to be attempts made to keep these crafts, now referred to as “restoration arts,” alive. Most of these efforts have either been conceived and executed as not-for-profit ventures, or have become part of a supplemental or advanced educational program (see Appendix A). The not-for-profit ventures have so far met with limited success; and the educational programs are too rare, too short, or too expensive to have had any significant impact on the erosion of these arts. Training in the restoration arts, like historic preservation in general, has come to occupy a socially and economically isolated position. (See previous essay.)

What is needed is a sustainable model of restoration arts training, made available to a far wider sector of the population, and linked to all the players in the building industry. This essay is an attempt to identify the key components of such a model and how they might fit together, and an invitation to further refinement and experimentation.

## THE TRADITIONAL AND NOT-FOR-PROFIT MODELS

Restoration arts training programs fall into one of two models: what we will call “traditional” and “not-for-profit.” Neither model is at present succeeding in training a sufficient number of craftspeople. By examining the characteristics of each, we might be able to extract the elements crucial to a sustainable restoration arts training program, and fashion a proposal for a new model.

In the traditional model, the process of an apprentice’s development into an artisan is an organic part of the building business itself, and historically, this model has proven itself to be sustainable. The sustainability of the traditional model was driven by the economy. Until recently, there was sufficient demand for work requiring trained craftspeople and their apprentices, and this fueled the system that produced them.

When owners could no longer afford to undertake quality restoration work on their buildings, they were left with three basic options: not to undertake the work at all; lower the standards by which the work was accomplished; or undertake only limited work to stabilize the structures. The result, in any case, was a decreased demand for the services of skilled craftspeople.

The traditional model of training began to unravel because training in the building arts is the product of a long process that begins for the apprentice with observing, handing-up, and fetching while on the job. Time spent performing these functions is part of the investment an employer makes while at the same time paying the apprentice a wage. The cost of this system of training is paid for out of the payment the employer



receives from building owners for completion of contracted work. Furthermore, dedication and a willingness to serve in whatever capacity the artisans demand are attributes apprentices must bring in order for this training model to be successful.

The not-for-profit model is more volatile than the traditional model since it is not self-financing. Rather, it is a philanthropic enterprise subject to the renewability of its funding, and in general has been unable to provide for its apprentices sufficient social support and job security to make the model sustainable.

In this model, the not-for-profit organization identifies a specific restoration project that it wants to undertake and secures the cooperation of the owner or curator. It attracts funding from an amalgam of public and private sources, establishes a base of operations, and assembles a staff both of administrators and trained craftspeople, who are paid a subsidized salary. Once this context is established, the organization is able to organize a training program and attract apprentices who can both work and train for the duration of the project.

The not-for-profit model is hardly sustainable because with the completion of a given project, the entity disappears. There is no longer a base of operations; the artisans who provided training move on to other employment; and there is no work left that can provide the basis of apprenticeship. The trainee finds him or her self with no financial resources, little guidance or support, and jobless.

Some not-for-profit models have achieved success, but these programs are the exception rather than the rule. Perhaps the most notable is the Pratt Partnership, now in its sixth year. The program includes the devel-

opment of social support systems for apprentices and has established links to the building industry for training and later employment. The program has broadened its base to include consideration for the needs of the individual apprentice as well as the industry, and has forged a program that has so far proven sustainable.

Still, there is the need for establishing a sustainable program on a much larger and more ambitious basis, a program that could harness the energy and potential of New York City's unemployed youth and put them in the service of restoring the city's rich architectural heritage, which at present is suffering from disrepair and disregard.

#### TOWARD A SUSTAINABLE MODEL

Rather than try to develop a model of a sustainable training program, it would be better in this context to develop a proposal for creating an infrastructure that could support restoration arts training in a sustainable manner. Such a model would meld elements from the traditional model with those of the not-for-profit model. It would bring existing resources in the private sector in contact with existing governmental functions to produce a newly configured infrastructure, so that the artisan is supported not only in the context of industry, but in the context of society.

The cornerstone of such an approach is education, which can never begin too early. Yet we can limit our vision for the moment and concentrate on the age when young people first encounter vocational training. High school (or junior high school at the earliest) is when students traditionally begin shop training. It is ideally at this juncture that the public education system could be redesigned to provide a specialized vocational pursuit in restoration arts.

A beginning has been made by the Historic Districts Council of New York City. They have published a book of lesson plans for elementary and high school students, to integrate historic preservation into their curriculum.

Aside from the practical value of making available to students a specialized educational program, there would also be an important message communicated: restoration arts training is not a white collar, masters-degree-candidate pursuit, but a viable part of the building trades industry. In order to give truth to the message, the program must go beyond the implementation of a curriculum.

Once students complete the program, they must have open to them real and affordable opportunities for further education and training, as well as employment. Further formal education probably poses the biggest challenge. Most course programs listed in the 1995 Cultural Resources Directory issued by the U.S. Department of the Interior are only of short duration, inclusive of hands-on training. There are a limited number of programs in other parts of the country, but these options would not be economically viable for the average graduate of a New York City public high school. Over time, an increased demand for training might create local programs for further training, but at present, only a scholarship or loan program would make it possible for graduating students to further pursue restoration arts in a formal educational setting.

Another viable alternative rests with building trades unions. Restoration arts training is gradually being recognized by the unions as separate or distinct from the traditional building trades. Traditionally, an apprentice

is admitted into a union by recommendation of a union mentor or employer. The apprentice undergoes a minimum of three to five years of training and classroom education on his/her sojourn to becoming a

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*"...restoration arts training is not a white collar, masters-degree-candidate pursuit, but a viable part of the building trades industry."*

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journeyman. There are requirements for minimum hours of training, most often at union hall facilities, in addition to on-the-job training at an employer's base of operations. Once journeyman status has been achieved, no higher merit is recognized by the union.

The building industry and union training responds to changes in marketplace demand and evolving building technology. As a result, new skills have been given preferential development over some of the older, more traditional skills. Yet recently, the market for building restoration has outstripped demand for new construction, and this may be an opportune moment to develop incentives and programs for unions to respond to by offering in-house training programs in the restoration arts. Their cooperation in establishing an infrastructure to support restoration arts training is fundamental to its success.

In addition, the building trades industry has an important role to play by providing apprentices the opportunity to learn the use of equipment in the proper context of its normal employ. In the metropolitan area there are still shops that cut stone, work with iron, sheet metal and stained glass, or fabricate cabinets and other products of made of wood. Nothing can replace the

experience an apprentice would gain by learning directly from an artisan in his or her own shop.

These elements of a newly configured infrastructure will not coalesce of their own accord. There is a need for an organization to act as catalyst and advocate, and also to forge links with existing social service organizations for the benefit of apprentices. For this, there would be required seed funding to prime the engine of sustainability.

The commitment of funds for the creation of such an organization and the effort to reconfigure the infrastructure would not, of course, be necessary or viable unless there is a demand for the services of restoration artists. Is there a demand, or is there merely the wish that there be a demand?

In New York City, there are more than 1,000 individually landmarked structures and 63 historic districts that include more than 20,000 brownstones, row houses and loft buildings. These numbers continue to rise as buildings 30 years of age become eligible for landmark designation. This is a growth market with an ever-increasing supply of quality landmark structures, government regulation to protect them, and government agencies to curate them (Department of Design and Construction, General Services Administration, Department of Parks and Recreation, Housing and Urban Development, Housing Preservation Development). Private developers are seeking tax credits for restoration efforts, and for the state and federal government to provide special tax incentives for restoration projects.

What is lacking in this entire field of endeavor is leadership, the articulation of a larger social and economic vision, and coordination. The key constituents of a

sustainable infrastructure in the restoration arts—the public education system, the building trades unions, industry, and social service agencies—are all pursuing their agendas and fulfilling their mandates, with no-one to show them and guide them to the opportunities possible through mutual cooperation.

The elements of a sustainable model of restoration arts training are present right now in New York City. With the establishment of an organization to act as catalyst and advocate, as well as the commitment of the city's political leadership, we can begin to reconfigure the city's existing infrastructure to support a sustainable restoration arts training program and preservation industry.



In 1995, following the completion of this study, Kate Burns Ottavino developed a proposal for a restoration arts vocational training curriculum and sought an appropriate educational partner. She presented her ideas to Ezra Ehrenkrantz, Chairman of the Center for Architecture and Building Science Research at the New Jersey Institute of Technology (NJIT), where she holds the position of Director of Preservation Technology. Ehrenkrantz thought that NJIT could develop a proposal for a high school curriculum for consideration by public high schools in New Jersey. The response was lukewarm—in New Jersey the schools are investing all their resources in programs that are computer oriented. While a few schools expressed an interest in using computers for documentation, the concept of a comprehensive program—which would involve hands-on work as well as state-of-the-art computer documentation—failed to attract them.

This proposal did receive an enthusiastic response, however, in New York City, where Ms. Ottavino contacted John Talmadge at Councilmember Fisher's office, who arranged immediately for a meeting with his boss, Mr. Fisher, who offered to assist in approaching the New York City Board of Education. William Thompson, President of the Board of Education was also very interested and arranged for Ms. Ottavino to meet Judy Rizzo, the Deputy Chancellor for Curriculum of the New York City Board of Education. That meeting was very timely: Ms. Rizzo and the Chancellor, Rudy Crew, had recently visited an NEH-funded vocational training project in Maryland and had been exploring comparable options for New York. Initially, discussion focused on developing a restoration arts program within an existing vocational high school. It soon became clear that the curriculum merited its own school. It was even proposed that a vacant classical building in Brooklyn be used to house it. Ms. Rizzo invited Ms. Ottavino to prepare a curriculum proposal for grades 6 through 12, which the Board of Education would submit to the NEH. Council member Fisher has pledged \$5,000 in

the seed funding to prepare the proposal and Ottavino is now engaged in securing the balance of the funds required, a total of \$15,000. If the program proceeds on schedule, a high school of restoration arts will open in fall 1998.

Another favorable development brought the World Monuments Fund in contact with the Mayor's Commission of Youth Employment Services (YES). In early 1997, Gloria Gilbert Stoga, YES coordinator, contacted WMF's president Bonnie Burnham about a nine-week contract for the repair and conservation of several sculptures owned by the New York City Department of Parks and Recreation. Burnham immediately referred Ms. Stoga to Ms. Ottavino, who submitted a proposal for a summer youth training program to restore the three monuments. The Times Square Business Improvement District (BID) agreed to fully fund the restoration of three monuments in the Times Square area: the George M. Cohan Monument and Father Francis Duffy Memorial in Duffy Square; and the Flanders Field Memorial in DeWitt Clinton Park. As part of the proposal, the BID also agreed to hire three students from the High School of Graphic Communication Arts who would learn the art of monument preservation under Ms. Ottavino's guidance and supervision. Jonathan Kuhn, historian and curator of monuments for the Department of Parks has been a key program advisor.

On May 12, 1997 the Art Commission of the City of New York formally approved the proposal. The nine-week program involves a broad overview of the restoration process as well as a hands-on experience. Artisans from A. Ottavino Corporation will do the hands-on restoration work (in their Ozone Park, N.Y. shop, apprentices do not actually carve until they have a minimum of one and a half years' experience). The program departs from apprenticeship training in that it will involve the students in the process of research and documentation. The latter is



consistent with restoration training and provides a valuable exposure to the restoration field beyond its vocational aspects.

The program offers a valuable opportunity for exploring the objective of establishing a high school curriculum, as well as to interest and engage city political leaders and citizens in a concern for the city's architectural fabric and its economic power. More immediately, the Times Square project provides young people with an educational and practical employment experience in monument restoration.

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WMF wishes to acknowledge those who made themselves available for interviews by the project consultants in 1995:

Erica Avrami, Training Program Coordinator, The Getty Conservation Institute, Los Angeles, CA

Irene H. Impellizzeri, Vice President, City of New York Board of Education

Gersil N. Kay, Building Conservation International, Pennsylvania

Timothy C. Marshall, Director, Capital Projects, The Central Park Conservancy, New York, N.Y.

Ivan Myjer, Restoration Director, Society for the Preservation of New England Antiquities, Waltham, Mass.

Denis R. Monagna, Ph.D. Architectural Historian, National Park Service, Philadelphia, PA.

Mary Pigott Ottavino, Former Executive Officer, SEEK (Search for Education and Knowledge) program of Brooklyn College, City University of New York.

David Overholt, National Trust for Historic Preservation, Washington, D.C.

Frank G. Sanchis, Director of Historic Properties, National Trust for Historic Preservation, Washington, D.C.

John H. Stubbs, Program Director, World Monuments Fund, New York, N. Y.

John Talmadge, Chief of Staff to Council Member Kenneth Fisher, Councilmanic District #33, Brooklyn, N. Y.

David Teitelbaum, President, Cathedral Stoneworks, New York, N.Y.

Wesley Waynes, Historic Preservationist, New York, N. Y.

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## APPENDICES

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## Existing Programs for Restoration Arts Training

While there is a large and varied supply of restoration arts training courses, few schools actually address the restoration arts in the context of a career. According to the 1995 directory of the Accredited Commission of Career Schools and Colleges of Technologies, the only trades that are taught are those of the brick mason, carpenter, painter, and paper hanger. For each of these trades, with the exception of carpenter, the Williamson Free School of Mechanical Trades (Pennsylvania) was the only source of training listed. For carpenter (and cabinetmaker), eleven schools were listed, among them the North Bennett Street School (Massachusetts). Not listed in the directory, but accredited by the U.S. Department of Education is the Belmont Technical College (St. Clairsville, Ohio), which offers a general hands-on approach to preservation training, but no specific field of concentration.

The 1995 Cultural Resource Training Directory issued by the U.S. Department of the Interior lists seven sources of apprenticeship, craft, and trade programs nationwide. The three listed in New York City are now defunct with the exception of the RESTORE program. However, there is in Maryland the Insulation Industry's National Apprenticeship Training, and in Massachusetts, the National Park Service Skills and Training (PAST) Program.

Notably, most of the course programs listed are measured in weeks inclusive of hands-on and/or classroom training. Two exceptions are the Colonial Williamsburg Foundation, with an apprenticeship pro-

gram of six years, and the North Bennett School with a two year diploma in preservation carpentry. For in-house training of its staff, the National Park Service also offers a two year apprenticeship program. In 1995, the Institute for Preservation Training in Newport, R.I. (see below) and the National Park Service have established a new job category with the federal Division of Occupational Titles: Carpenter (Preservation) 860.381-022.

During the research phase of this report, John P. Canham, director of the Institute for Preservation Training in Newport, R.I., was invited by WMF to present an overview of IPT's work. The brainchild of Mr. Canham, IPT had its origins in 1994, when he established an affirmative business alliance focused on preservation training. Through a relationship with the Support Center of Rhode Island, he used the rehabilitation of Surprise Valley Farm at Edgehills, Newport, to provide vocational training for both able-bodied and disabled persons.

IPT was founded in 1995 and has been a program of Vocational Resources/Goodwill Industries of Rhode Island since December 1996. The latter umbrella organization aims to "provide a context for people to learn work skills in a real work setting." Today, IPT has grown to a staff of nine and has three distinct program objectives: Historic Preservation, Community Development, and a new Windows of Opportunity workshop. The organization continues to secure strategic business alliances throughout greater New England.<sup>1</sup>

In addition to these programs, there is a fair proliferation of intensive courses, at least thirty or more, all measured in weeks, some of which are given at centers such as the Campbell Center in Illinois, RESTORE in New York, and the Preservation Institute for the Building Crafts in Vermont. Courses of a developmental nature lasting two years or more exist mostly at the higher education level. [Currently there are eight colleges granting undergraduate degrees and 44 schools issuing graduate degrees in historic preservation].

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## Proposal To Create A Vocational/Technical High School For The Restoration Arts

*Submitted by Kate Burns Ottavino, M. Arch., M.S. Historic Preservation*

*Director: Preservation Technology Center for Architecture & Building Science Research,  
New Jersey Institute of Technology (NJIT)*

### THE NEED

**T**he need to develop an educational training program for a high school curriculum on the Restoration Arts stems from a shortage of trained restoration artisans in the building trades, a shortage acknowledged and of concern professional architects, engineers and preservationists, educators, contractors, and building owners alike. In large measure this shortage is the result of an ever-increasing number of historic districts, heritage areas, landmark and landmark eligible structures. The increase in our nation's awareness and desire to protect and perpetuate the life of its historic properties stems from the enactment of Federal legislation, the Historic Preservation Act, establishing the Advisory Council on Historic preservation and the National Register of Historic Places in 1966. This Act also spurred the formation of local Landmark Commissions across the country. However, for several reasons, training in both the public and private sector has not kept pace with the growing needs of the residential and main street commercial renovation/restoration markets. These reasons include lack of managerial commitment, costs, and a scarcity of resources for ongoing funding.

As a result, demand for qualified restoration artisans exceeds the supply in the market place today.

Despite this shortage, a recent analysis of the construction industry by the American

Institute of Architects shows that spending in the renovation/restoration sector of the building industry has increased at a rate of 7 percent per year over the past fifteen years and now occupies 44 percent of the volume of construction work in the United States (AIA Journal/February 1996). In New Jersey, for every \$1 million expended on historic rehabilitation nearly 75 jobs are created, of which 39 are in the construction, manufacturing, retail and wholesale trades (New Jersey Historic Trust, "Historic Rehab Pays Off Big for New Jersey"). In New York city there are 958 individually designated landmarks and 68 historic Districts comprised of 20,260 buildings (New York City Landmarks Commission). These staggering figures, combined with the fact that for every \$1 million invested in the rehabilitation of historic properties there is \$2.75 million in economic activity generated, has led members of both parties in Congress to co-sponsor the Historic Home Ownership Tax Act" (S.1002 & H.R. 1662) in order to encourage more residential rehabilitation investment.

Congress has realized that homeownership tax credits will foster a stronger economic environment and create skilled jobs, which will more than offset the lost tax revenue. These tax credits, combined with the U.S. Bureau of Labor projections that the U.S. will need another 35,000 bricklayers and stone masons within the next ten years (while projecting only moderate overall economic growth), are strong indicators of

a healthy and growing job market in the skilled masonry and trowel trades alone (International Masonry Institute Today, January 1996).

It is time for our Vocational/Technical High Schools to take the lead in capturing this skilled job market for its graduates by preparing their students to serve the growing number of homeowners, apartment owners, and main street commercial building owners undertaking the renovation/restoration of their historic properties. A graduate of the Restoration Arts Program could expect to earn between \$10 and \$20 dollars per hour in their first year of employment depending upon their level of skill. These wages, are at least comparable to those of beginning college graduates pay scale. Further, the Restoration Arts High School graduate will be able to realize the benefits without having to invest the time and money higher professional education required to earn similar wages in alternate fields, with regard to earnings growth, the wages in the field for a journeyman artisan employed at a union scale can be as high as \$65.00 an hour including benefits in New York City. The availability of high-quality, high skilled jobs will afford the graduate of a Preservation High School a challenging, stimulating, and rewarding future.

#### CURRICULUM GOALS AND REQUIREMENTS

Currently most building preservation programs are geared to the college and masters degree level participant, giving rise to either a "white-collar" or counter-culture image of restoration practice. For more hands-on instruction, these academic programs are supplemented by short term intensive training" sessions provided by

non-academic institutions or centers and a conferences in the form of workshops. Such "intensive training" courses are generally open to all who wish to participate and pay the requisite fees. These courses are usually brief in nature, addressing either the state of the art of a particular area in preservation or a specific problem commonly found during the restoration of certain building materials, with titles such as "How to Clean Masonry" or "How to Make a Replica Plaster Medallion."

What does not exist is a program geared to developing a more traditionally trade-based artisan who specializes in restoration. This is the constituency that must be trained to meet the growing restoration needs of small business and homeowners. Critical to the development of a broader-based restoration artisan constituency is a systematic restoration arts training program at the apprenticeship level. The systematic training required by such a program could be most successfully administered within the framework of a Vocational/Technical High School. There are many aspects to training at this level which are helpful to the students. One example is the discipline is best fostered within a framework that is prepared to offer the appropriate professional and social support systems that may be needed to integrate students into the expectations and requirements of the working world.

The concept of a Vocational/Technical High School program for the Restoration Arts is modeled in part upon the development of Vocational High Schools for industries such as the automotive, aviation, and printing trades before World War II as well as the High School of the Performing Arts in New York City. In brief, the program would consist of an integrated curriculum

devoted to the development of young people's abilities in the Restoration Arts by way of both hands-on and classroom training. An integrated curriculum would emphasize the building arts in the context of the academic curriculum in addition to the practical trade techniques provided by shop training. For example, in an American History course Thomas Jefferson's choice of the classical style of architecture to represent our young nation would be discussed in the context of the Greek ideal of a democracy as a model for the United States Government. Other subjects such as Chemistry, Physics and Geology would be illustrated with experiments involving the properties and constituents of building materials including how they are formed and how they deteriorate. Class trips would be taken to look at neighborhoods with historic brick patterns and identify case studies of building material deterioration such as stone stoops, metal cornices, and wooden porches.

Shop work would include introductory courses in each of the building materials to enable the student to select the trade of his/her choice. The curriculum would provide the student, in combination with classroom training, a minimum of 480 hours of practical training in the restoration trade of their choice, prior to undertaking a summer internship program. Such preliminary training would enable the student to accrue on-the-job training with the status of an apprentice during the summer. Over a period of three to four summers, a full year of apprenticeship could be served prior to graduation. An accelerated apprenticeship program for interested and qualified students might be developed, depending upon the number of hours allocated during the

academic year and the degree of industry participation.

A critical component to the success of a high school program for the Restoration Arts will be its link to local industry. Existing industry will be able to provide the infrastructure for skilled apprenticeships to be undertaken in a realistic work environment. Such an environment will provide the necessary equipment for training in its proper context, with Journeymen Supervisors overseeing student efforts on real-life projects. Further, by collaboration with industry, the student will get quality training without a massive and redundant investment in "tooling-up" by the school.

In short, the thrust of the curriculum is to create an integrated academic and hands-on restoration training program whereby an educated and enlightened work force capable of highly skilled restoration in the traditional building arts can be developed.

#### THE ROLE OF THE CENTER FOR ARCHITECTURE AND BUILDING SCIENCE RESEARCH:

The staff of NJIT are uniquely qualified to develop the criteria and curriculum for a vocational/technical training program which will satisfy the skills and academic development requirements of a Restoration Arts training Program. The experience of our staff in the academic requirements of the discipline as well as the hands-on skills development of the restoration arts represents over twenty-five years of leadership in the field of Historic Preservation.

The technical and academic areas of training will be integrated by the Center into the existing curriculum as provided by the current Vocational/Technical High School

course selection. The curriculum for each of the courses in both technical and academic areas will be modified by the Center to include the core requirements of a Restoration Arts Program. In addition, criteria for the qualifications of supplementary faculty for teaching the historic preservation aspects of these courses will be prescribed. Actual faculty members can be preliminary recommended by the Center for specialized teaching unique to Restoration Arts.

The Occupational Profile and Shop Competency Certificate requirements of the State will also be reviewed and specific criteria for Restoration Arts performance levels will be proposed for incorporation into the Certificate's requirements. Selection criteria for industry participation in an AP (apprenticeship program) will be identified by the Center as well as potential local industry participants.

The appointment of an Advisory Board is recommended for a Preservation High School. The Center would recommend those institutions whose members would be appropriate to serve on such a Board, and would prescribe the qualifications of additional individual members who would be desirable. Actual Board Members could be proposed by the Center. The purpose of the Board is to ensure that a consensus is achieved, one that will be recognized by the Historic Preservation profession throughout the State and the Nation, on the academic and vocational/technical goals of the Restoration Arts program as well as the means and methods to realize them.



# WORLD MONUMENTS FUND

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