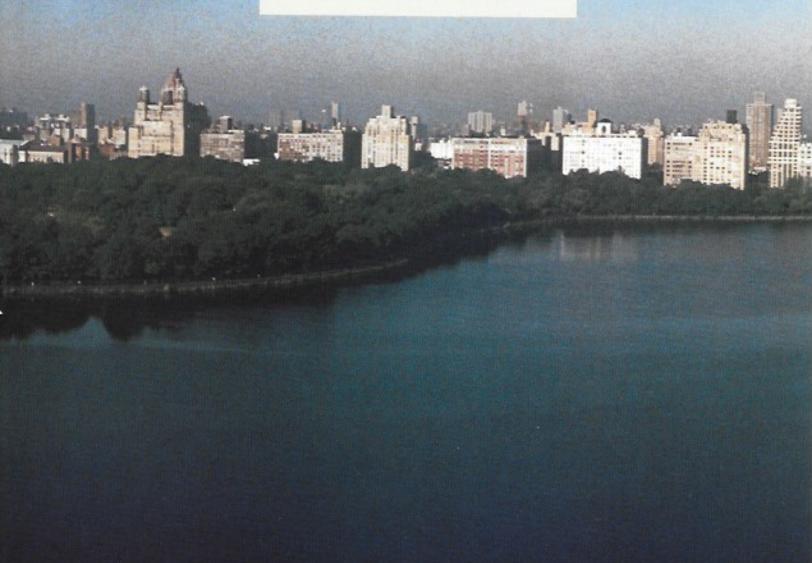
URBAN OPEN SPACE

AN INVESTMENT THAT PAYS

A Monograph Series

Real Estate Values



This monograph was made possible by funds granted by the Charles II. Revson Foundation. The statements made and views expressed, however, are solely the responsibility of the author.

Cover Photo: Joel Greenberg Central Park seen from 1080 Fifth Avenue.

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A Monograph Series

Real Estate Values

By Tom Fox



The Neighborhood Open Space Coalition 72 Reade Street New York , N.Y. 10007 (212) 513-7555 The Neighborhood Open Space Coalition is a working partnership of over 130 member organizations dedicated to enhancing the quality of life for all New Yorkers by expanding and protecting New York City's parks and open spaces. Through research, planning and advocacy, the Coalition is making parks and open spaces a higher priority in New York City's planning, programs and policies.

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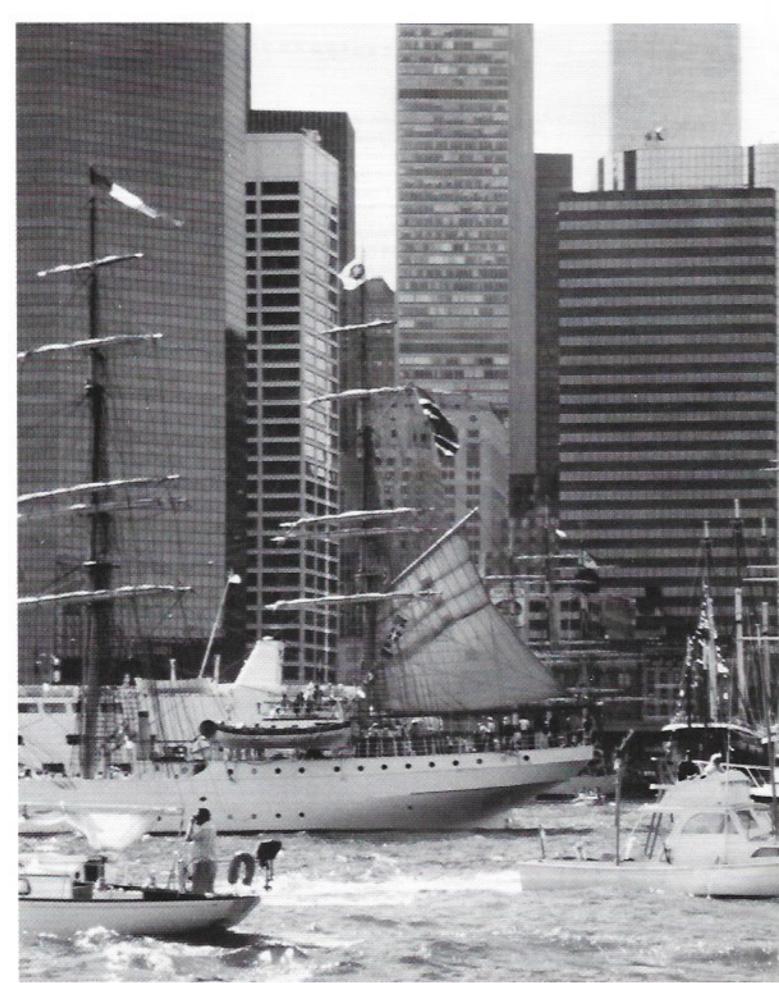
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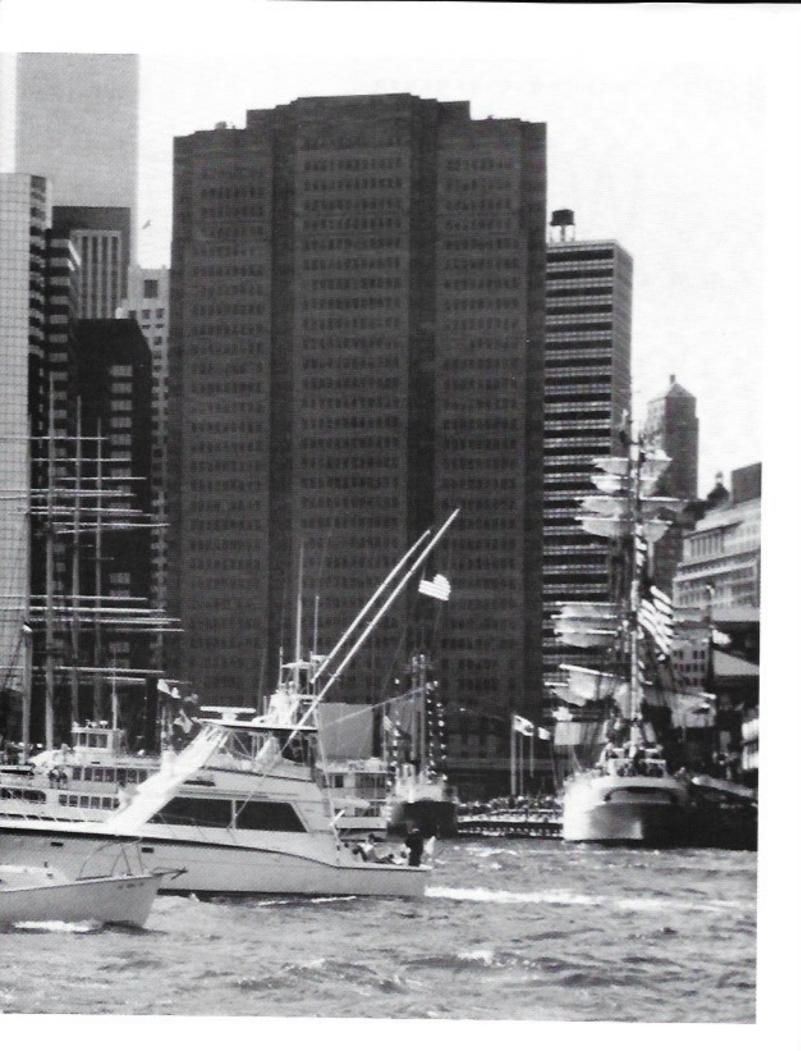
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DEDICATION

To
Liz Christy,
Al Fein,
Rose Gardella,
Bea Orange,
Carmine Simeone,
and Philip Winslow,
who have left New Yorkers
richer for sharing
their vision
and talent.



Today, the importance of open space to real estate development is most apparent on the waterfront.



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The staff and the trustees of the Charles II.

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and the production of this report. A Loeb

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greatly enriched the final product.

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PREFACE

s we approach the year 2000, we are experiencing vast and rapid change in both the landscape and the economy of American cities. The postwar exodus from the city, failed urban renewal efforts, and the loss of manufacturing and maritime industries along urban waterfronts have left large parts of our cities vacant or nearly derelict. The "big city" problems of traffic congestion, air pollution and overcrowding have spread to entire metropolitan regions, and these problems now challenge the livability of many suburban communities and "new cities" in the south and west. Everincreasing demands on a limited tax base are presenting difficult decisions to government planners and managers about infrastructure investments and operating budgets.

Too often the money required for the planning, development and management of public open space is one of the first casualties when finances are tight. Corporate and government leaders consider open space an amenity or a perk, seldom seeing the essential role that it plays in the urban economy. Open space is much more than something nice to look at. Open space is not a luxury, added only when the important things have been taken care of. Open space enhances city life; it plays a major role in urban development and management.

Open space is our parks and parkways, our botanic gardens and community gardens, our wetlands and woodlands, zoos and sports stadia. Open space is our streets and school-yards, our playgrounds and plazas, our beaches and athletic fields. Open space is all the places where people relax and exercise, and experience the natural world, and all those who share it with us.

Open space in cities encourages real estate development because it increases the value and marketability of adjacent property. Open space, by providing room for exercise and relaxation, benefits public health reducing health-care and insurance costs, and enabling people to work more productively and live longer. Landscaping reduces energy consumption, saving millions in municipal, corporate and individual spending on heating and cooling. As the urban green cleans the air, and absorbs both storm water and noise, it reduces the need for mechanical pollution control systems and large-scale infrastructure investments. And by improving the image of a city, open space helps increase tourism, and make the city a more desirable place to live and work.

Open spaces have successfully stimulated and shaped the growth of cities, stabilized and revitalized neighborhoods and complemented the redevelopment of downtown business districts. In the late-19th century, when American cities such as New York, Boston and Kansas City were expanding into surrounding farmlands, open spaces were major organizing elements, supporting this outward growth and strengthening the identities of these cities as cultural centers. In the beginning of the 20th century, the suburbs grew, and again open spaces drew development out to surrounding forests and farmland. But the exodus of increasingly mobile city residents began to chew up the landscape at an alarming rate.

Now, as suburban development sprawls across America, there is a growing concern about the preservation of our rural landscapes. Increasing density and day-long traffic congestion are taking their toll on the quality of life in suburbs — the traditional distinctions between "city" and "suburb" are blurring.

Gentrification is seen by some people as evidence that a new dynamic is bringing people back to the cities. Expanding and managing urban open space enhances the quality of city life, reshaping them as places where people want to live, work and visit. And if we can successfully bring people back to the cities, we might also slow down the deterioration of the suburbs. We could make better use of the sewers, water lines, roadways, mass transit and other infrastructure that cities have spent countless millions to develop over the past 200 years. By investing in urban open space now, as well as in other essential services such as education, public safety and housing, we could create vital, more healthful and economically viable metropolitan areas in the 21st century.

This four-part monograph series describes many of the contributions that open space makes to the economy of cities. By highlighting its impact on real estate values, public health, energy conservation and infrastructure investments and the image of the city, we will present open space as a critical element in the urban economy. Each monograph contains an overview of historic studies, academic and economic research and current projects that clearly portray the economic influence of open space. Our purpose is to show that, overall, this information demonstrates a strong economic return on public and private investments made in the creation and care of urban open space.

There's an emphasis on New York City in these pages because many of the case studies were experienced firsthand in my work there. Boston is also well represented, the result of the year I spent there as a Loeb Fellow at Harvard University's Graduate School of Design,

The monographs are written for citizens, and for the planners, managers and builders of cities. This series is intended to help us approach the next period in urban and metropolitan evolution by broadening our understanding of the important role open space plays in the economy of cities.

Economy is very much like ecology — it can be difficult to identify all of the variables that influence any particular situation, let alone completely understand the influences of each variable. Open space shouldn't be justified by its economic benefits alone. That would diminish the importance of its many other benefits. But if this economic argument isn't made, urban open spaces will surely suffer further neglect and abuse.

I hope that the important role open space plays in so many other aspects of our lives, is apparent to all of us.

INTRODUCTION

blic expenditures for the acquisition, construction and maintenance of new parks, and for planting trees on city streets, and for clearing waterways and preserving vistas, return to a city in higher real estate tax revenue. Investments in public open space enhance the image of a city and its neighborhoods increasing both the marketability and value of local property. This value benefits individual landowners, the real estate development community, and, most importantly, the municipal tax base. The careful planning and management of public open space is without a doubt a crucial investment in any urban economy.

The availability of public open space is often a key factor in people's decisions about where to live. For some families, having open space close to home helps augment limited household budgets. Many others feel that tree-lined streets and views of fields, woods, lakes and rivers, add to the ambiance and desirability of a neighborhood. This is evident in the names of prestigious neighborhoods such as: Riverdale and Forest Hills in New York, or Oak Park in Chicago. Often corporations set their headquarters and other facilities in parklike surroundings which complement the architecture, and enhance the image of corporate products or services. There's no question that open space is valued by people at every income level. Phipps Houses, the largest nonprofit residential developer and manager in New York City, has included high-quality open space in all of its projects over the past 50 years, from Sunnyside in Queens, and Plaza West on Manhattan's East Side, to Lambert Houses in the South Bronx.

In the mid-19th century, as many cities were growing, municipal governments used new parks and parkways to lure real estate development into the surrounding countryside. In many cases, public open space was the primary organizing element in new development,

determining the new land-use patterns in these expanding cities.

This concept was applied again in the early 20th century with the creation of workingclass communities in cities, such as Sunnyside
Gardens in Queens, and garden cities, new
towns, and greenbelt towns in the suburbs,
such as Radburn, New Jersey; Greendale,
Michigan and Columbia, Maryland. In all of
these places open space was a major component of new real estate development. And
when businesses began to re-invest in central
city properties, open space once again played
a major role in organizing and enhancing
downtown development.

The urban exodus to the suburbs after World War II was followed by massive urban renewal programs. In the 1960's and 1970's a vicious sequence of disinvestment, ahandonment, arson and demolition took a terrible toll on many inner-city neighborhoods. Today, the relationship between real estate values and open space can be seen in the community garden movement that has helped to stabilize and revitalize inner-city neighborhoods in Boston, Philadelphia, Louisville, Chicago, Austin, San Francisco, Seattle, Washington D.C. and over 70 other cities across the country. Local residents, seeking to improve their neighborhoods, and to provide adequate and safe recreation for their families, planted flower gardens and vegetable gardens and built playerounds, ball fields and sitting areas on vacant lots near their homes.

This same desire and willingness to be involved can be seen in middle- and upper-income neighborhoods where block and neighborhood associations have planted street trees and launched beautification programs. "Friends of the Park" groups have cropped up all over the country to rejuvenate neighborhood parks. The benefits and values of public open space seem to be understood by local

residents across the United States, irrespective of their economic or social status.

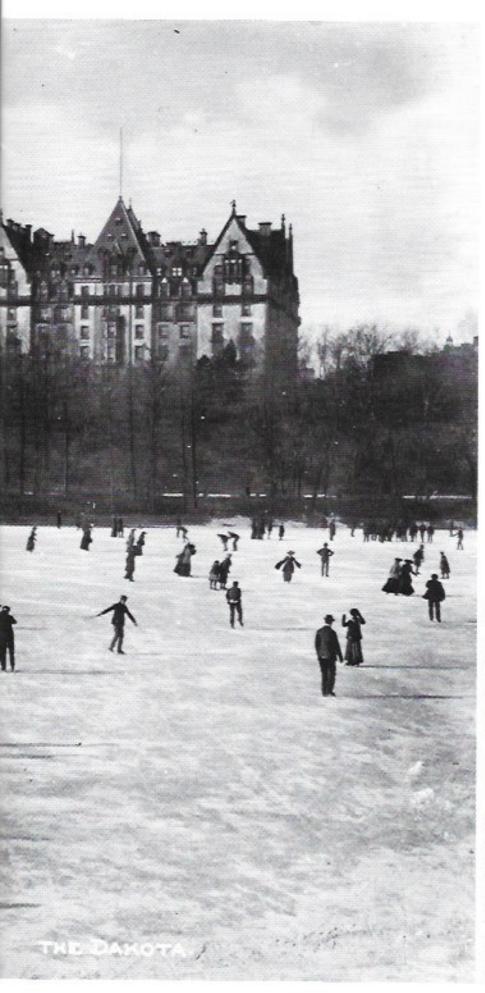
Recently, many cities have started looking at their derelict waterfronts the way they once looked at surrounding farmland in the 1860's. For the past 15 years, open space has been increasingly used to organize and promote waterfront development, including the harbors of Boston and Baltimore, the new recreation areas along the Arkansas River in Tulsa, Oklahoma, downtown redevelopment projects like Riverwalk in San Antonio, Texas and complete residential and commercial communities, such as Battery Park City in Manhattan. The building of esplanades and parks increases access to the waterways, enhances the views, raises the value of new real estate development at the water's edge, and changes the image of an urban waterfront from that of an industrial wasteland to one of an attractive place to live, work and visit,

Often the beneficial relationship between open space and real estate development isn't well understood. In most major cities today, there are tremendous conflicts between open space advocates and real estate developers. The same battles are forever repeating themselves. Constructing a new park or building requires a tremendous amount of time, talent and money. These resources shouldn't be wasted on unnecessary conflict. Truly, open space and real estate interests are complementary.

We must recognize the need for a working partnership of the government, business and civic communities to rebuild our cities as livable places in the 21st century. Such a partnership can insure a well balanced approach to urban and regional planning. Urban open spaces seldom work or last unless they are well designed, well managed and well used. Overdevelopment creates too much density, which detracts from real estate marketing and sales, and increases long-term management costs.

Public and private investment in the creation and care of public open space is essential for urban revitalization and sustainable metropolitan growth. Finding the right balance of open space and real estate development will meet not only the needs of local residents, but the economic needs of business and government.





PUBLIC PARKS AND THE GROWTH OF AMERICAN CITIES

n the great cities of Europe, parks historically were the pleasure gardens of the nobility. The privileged few kept large hunting grounds for recreation, and sold off portions of their estates for new developments whenever their fortunes needed replenishing. By contrast, we can see in the major American cities of the mid-1800's, with their rapidly growing populations, how new public parks organized the growth of cities. The most striking examples are George E, Kessler's creation of the Kansas City park system, and the works of Frederick Law Olmsted and Calvert Vaux in New York City's Central Park, Brooklyn's Prospect Park and Boston's Emerald Necklace.

Early on, local governments realized that large public parks lured new real estate development to the outer areas of the city, and that parks could be used as a marketing tool, to expand and strengthen the city's tax base. Land was cheap in the surrounding countryside and municipal governments found that the increased tax revenue easily covered their initial investments to acquire and improve the land.

The relationship between these early parks and real estate development wasn't necessarily well understood by civic leaders or the real estate industry. Since the creation of Central Park, there have been hundreds of proposals for all sorts of buildings inside the park. In the 1880's, there was a tremendous struggle in Kansas City between park advocates and real estate developers, who ridiculed proposals for a new park and boulevard system as financial folly. But land speculators and builders soon learned that public parks and open spaces heightened the desirability of building sites and the value of new housing. No one can dispute the fact that the large public parks in New York and Kansas City added significantly to the growth and prestige of those cities. And their city governments profited from the increased property taxes on adjacent residential and commercial properties. Most important to the public however, parks and open space gave people places to exercise, relax and enjoy nature. Parks made their cities far more livable.

NEW YORK CITY Central Park

he relationship between public parks and real estate values is seen most clearly in New York City's Central Park. Its success stimulated the creation of the entire New York City park system, and supported the public park movement in many other American cities in the late 19th century.

In the 1850's, New York's civic, government and business leaders knew something had to be done to protect the quality of life. The 1860 census showed that New York City's population had increased in only three generations from 4,302 to 814,524. As Frederick Law Olmsted and Calvert Vaux suggested in a report attached to their award-winning design for the park, "The whole of the island of New York would, but for such a reservation, before many years be occupied by buildings and paved streets.... and that all its inhabitants would assuredly suffer, in greater or less degree, according to their occupations and the degree of their confinement to it, from influences engendered by these conditions,"

Some land speculators and real estate developers understood that creating new parks and open spaces would increase the value of adjacent private property. An advertisement for the auction of a city block between 70th and 71st Streets off Central Park in February 1869, by A. H. Muller, P.R. Wilkins & Co. stated: "Improvements will be made in this Locality in a much shorter time than people suppose who do not watch closely the irresistible upward movement, and consequent rapid absorption of Lots; and it is certain that as the improvements progress, the value of the Lots will increase from time to time, to a point as high, if not higher, than has been reached in any other part of the city, thus making a good investment, or to obtain a security for capital as reliable as the increase of population is certain,"9

In 1859, after most of the parcels for Central Park were purchased, the Board of Commissioners of Central Park asked the legislature to authorize the acquisition of more land to extend the boundaries of the park from 106th Street to 110th Street. Once authorization came through, the Commissioners of Appraisal were established, to appraise the value of the land necessary to extend the park. Their appraisal of all the land in question was \$1,499,429.50; their report suggested that the city should pay \$1,073,523, and that the remaining \$425,906.50 should be paid by

Figure 1-1
Frederick Law
Olmsted
documented how
property values and
real estate taxes
increased as a
result of Central
Park's construction.

Ward	1856	1857	1858	1859	1860	1861
Twelfth	\$ 8,149,36	\$ 8,134,013	\$ 8,476,890	\$ 10,062,725	\$ 11,857,114	\$ 12,454,375
Nineteenth	8,041,18		10,971,775	12,621,894	16,830,472	16,986,152
Twenty-second	10,239,02	2 10,489,454	11,563,506	13,261,025	14,775,440	17,666,866
TOTAL	\$ 26,429,563	\$ 27,182,091	\$ 31,012,171	\$ 35,954,644	\$ 43,463,026	\$ 47,107,393
Ward	1862	1863	1864	1865	1866	1867
Twelfth	\$ 13,100,383	5 5 14,134,825	\$ 15,493,575	\$ 18,134,805	\$ 18,381,650	\$ 24,940,737
Nineteenth	17,903,13	19,003,452	20,462,607	23,070,890	37,636,050	46,249,340
Twenty-second	18,041,85	18,281,222	18,756,276	19,824,265	24,052,715	30,915,240
TOTAL	\$ 49,045,379	\$ 51,419,499	\$ 54,712,458	\$ 61,029,960	\$ 80,070,415	\$102,105,317
Ward	1868	1869	1870	1871	1872	1873
Twelfth	\$ 28,143,005	\$ 42,648,865	\$ 48,869,700	\$ 50,362,925	\$ 54,568,885	\$ 62,457,680
Nineteenth	53,608,040		71,319,633	77,771,930	91,283,545	110,519,305
Twenty-second	36,175,185		53,146,920	57,666,340	60,185,820	63,104,530
TOTAL	\$117,926,230	\$150,224,743	\$173,336,040	\$185,801,195	\$206,038,250	\$236,081,515
Showing an incres	1856 and voluntion of					236,081,515.00 26,429,565.00
					S	209,651,950.00
The total expendit					19	
The cost of land	t, 1857 to Januar	y 1st, 1874, is			\$	and an article of the control of
		city is				5,028,844.10
The cost of the Pa	rk to the city is				5	13,902,515.06
The rate of tax for as above stated, ar	the year 1873 is	2.50, yielding on	the increase of va	aluation		
as anote mater, in	mercase ii tax	anounting to 35,2	11,270.73.			
Total increase of a					S	5,241,298,75
The annual interes	t on the cost of l	and and improven	nent of the Park,			
up to this tim	e, at six per cent			\$ 834,	150.94	
Deduct one per ce.		of stock, issued				
at five per cer	TIL.			3,	933.00	
E						830,157.94
Excess of increase land and impa	of tax, in three to rovements	wards, over interes	tt on cost of			4.411.140.01
Table and					5	4,411,140.81

private landowners who would benefit from the park extension.

In November 1860, the Board of Commissioners, distressed by what they considered excessive valuation, threatened to stop buying new property. But the following year a second commission recalculated the original appraisals. Their report reduced the assessed valuation on the city by \$65,018 and on the private landowners by \$254,841.50. Although the private landowners' costs were greatly reduced, they paid a significant amount of the cost for Central Park's expansion.4

Frederick Law Olmsted was aware that the City of New York would be concerned about the costs of both land acquisition and park construction. To justify the expenses, Olmsted began tracking the value of real estate in the three wards surrounding the park in 1856 (Figure 1-1), comparing the higher tax revenue from this adjacent property to the interest the city was paying for the cost of the

land and its improvement. When it was only half complete, Central Park began to generate revenue. Olmsted documented a \$55,880 net return in annual tax from the park in 1864.5

By the end of 1873, Central Park had cost the City of New York \$13,902,515.60. Land acquisition had cost \$5,028,844.10, and capital improvements to the property came to \$8,873,671.50. In his 1875 report to the Board of Commissioners, Olmsted presented the total cost for Central Park and the increase in tax revenue from the surrounding properties. His chart displayed the values of property in the wards adjacent to the park, which he then compared to the average increases in property value in the city's other wards during the same period.⁶

Olmsted suggested that without Central Park, the property values in the three wards surrounding the park would have appreciated at the same rate as property in other city wards, which was 100%. At that rate the properties in the Twelfth, Nineteenth and Twenty-Second Wards would have been worth \$53 million in 1873 — but their appraised value was \$236 million. Olmsted proposed that the tremendous increase in property value, and tax revenue, was a direct result of Central Park. In 1873 alone, income from property tax in the three wards, minus the interest on the cost of the land and its improvements was \$4,411,140.81.

Olmsted's economic analysis was simple, and he acknowledged other variables that influenced property values, such as the construction of new avenues. Still his basic assumptions can be observed in dramatic changes in Fifth Avenue, which in the 1870's was a country road bordered by farmland. By the 1890's, the homes of many of America's richest families, including the Astors, Vanderbilts and Rockefellers, could be found on Fifth Avenue from 46th Street to 72nd Street.⁷

THE CITY OF BROOKLYN

Prospect Park

n the mid-19th century, competition was keen between the cities of New York and Brooklyn. Both were vying for new business, commerce and residents. With the construction of Central Park, government officials in Brooklyn felt the need for a park that could rival it. After all, public parks were proving to be prestigious. Government officials hired Frederick Law Olmsted and Calvert Vaux, who had been so successful with Central Park, to build a great park in Brooklyn. The two landscape architects designed and built the 526-acre Prospect Park, which Olmsted considered his finest creation.

In their 1868 report to the president of the Board of Commissioners of Prospect Park, Olmsted and Vaux stated: "The economical advantages were pointed out of preparing and adopting plans for the purpose well in advance of the public demand, which it was intended to anticipate, and while land properly situated might yet be selected in the suburbs of such moderate value that no private interests of much importance would be found to stand in antagonism in this respect to those of the public."

They proposed that the new park would be a significant factor in Brooklyn's financial prosperity, and said that the mere designation of the area for a new park was having an impact: "The effect of what has already been done, under the direction of your Commission, has been to more than quadruple the value of a certain portion of this land.... The advance in value, in this case, is quite marked at a distance of a mile, and this local advantage has certainly not been attended by any falling back in the value of other land in Brooklyn."

Their perception, perhaps slightly exaggerated, was supported by Susan Freeman Lawrence, who at that time had recently moved to Brooklyn from Boston. She wrote in her family history: "During the summer preceding [1865] your father and his brother Henry had bought a house on First Street near Seventh Avenue in Brooklyn [two blocks from Prospect Park]. It was a large frame house in a large garden with stables. It had been papered and painted and furnished and was a very sunny attractive home." But only two years later, her family had to move back to Boston: "We had an excellent offer for our house which was rising in value on account of the proposed new park," she wrote.10

In their design of Prospect Park, Olmsted and Vaux introduced parkways, which were broad, tree-lined boulevards. These parkways created major approaches to the park and extended the park out to surrounding farmlands. Prospect Park was designed to anticipate the growth of the City of Brooklyn, just as Central Park was designed for the growing population of New York City. But one of the main purposes of the new park and parkways plan was to stimulate new real estate development.

Talking about the potential influence of the parkways, Olmsted and Vaux said, "It is clear that the house lots facing on the proposed Parkway would be desirable, and we assume that the most profitable arrangement would be to make them, say, 100 feet wide, and of the full depth between two streets, convenient sites for stables being thus provided."

BOSTON

Commonwealth Avenue

he impact of tree-lined boulevards on surrounding property values can be clearly seen along Commonwealth Avenue in Boston's Back Bay. From 1859 to 1880, under the direction of the Commonwealth of Massachusetts, the City of Boston was expanded by a massive filling in of the Back Bay. State planners laid out the project on a grid, around a grand allee which was modeled after the main boulevards of Paris. This new boulevard, Commonwealth Avenue, brought the Boston Common into the new Back Bay landfill (Figure 1-2). The adjacent property quickly caught the attention of upper-class residents who were in an already overcrowded Beacon Hill. Soon Commonwealth Avenue and nearby Beacon Street were lined with elegant homes.

As Bainbridge Bunting observed in his book. Houses of Boston's Back Bay: "The nineteenth century planners preserved the Charles River despite repeated attempts to engulf it in short-sighted real estate profiteering. Moreover, they not only created an orderly district but protected it with clearly defined borders from the creeping contagion of adjacent blighted areas. This enabled the district to retain for a long time its character as a highgrade residential quarter and finally to make an orderly transition to an area of offices and apartments.... And finally, in its initial plan and subsequent development the Back Bay retained broad channels of trees and grass and open water that penetrate to the very center of modern Boston."12

Olmsted's financial arguments, derived from documenting the increased property values around Central Park in New York City, were used in Boston. An 1890 report, published

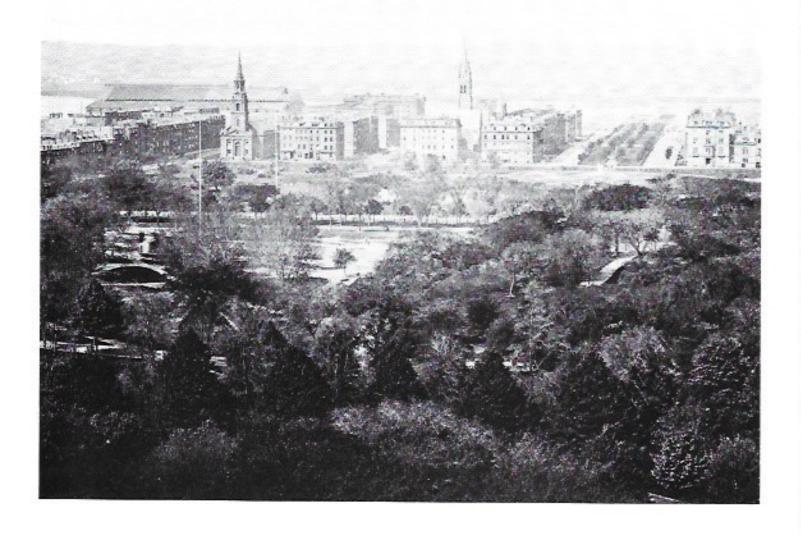


Figure 1-2
A broad tree lined
boulevard, Commonwealth Avenue helped to
lure Bostonians out to
the new real estate
created when the Back
Bay was filled. Arlington
Street and the beginnings of Commonwealth
Avenue as seen
from the State House
circa 1870.

under the authority of the Metropolitan Park
Commissioners, stated, "The citizens of
Boston had examples before them, in the parks
of neighboring American cities, which assured
them that, while the cost of necessary open
spaces would be great, the returns in taxes
from the enhanced value of real estate in the
vicinity of the new parks, as well as the
income from betterments, would ensure them
a strong financial support.... The experience
of other cities had proved that, aside from the
benefits accruing from parks as attractions to
travelers and as means for affording aesthetic
delight in landscape, there was a tangible

effect produced by them to improve the moral and physical welfare of communities."13

The commissioners summed up their description of Franklin Park in 1900: "Franklin Park has cost for land and construction, to the present time, \$3,800,000, while the cost of maintenance for the year 1899 amounted to \$36,700. The increase in valuation of lands in the vicinity of the park, which were assessed for betterment, was \$1,230,000 between 1883 and 1890. Of this increase at least ten per cent may be attributed to the presence of the park."

KANSAS CITY

The Park and Boulevard System

n 1881, a newly established newspaper, The Kansas City Star, began to campaign for public parks in Kansas City. The editors pointed out that Kansas City had 65,000 people and no notable public recreation facilities for them, The mayor opposed the idea of new city parks, and so did a group of wealthy businessmen. By 1887, however, A.R. Meyer, a German businessman, joined forces with the owner of the Star, Colonel Nelson, adding significant influence and resources to the push for parks. Together they drafted a park bill for Kansas City - but it died in committee during the 1890 legislative session. In 1892, a new mayor was elected, and he appointed a Parks Board. The landscape architect, George E. Kessler, was then hired to develop a proposal for a future system of parks. The following year, Kessler presented his proposal to the Board of Commissioners.

The opposition fought back vigorously, saying that the plan proposed by Kessler and Meyer was going to cost Kansas City millions. At first, the Park Board considered financing the parks by raising property taxes. But hig landowners banded together against this. A solution came from a lawyer, D.J. Haff, who suggested establishing special park assessment districts, where property taxes would increase as real estate values adjacent to the improved parks increased. In 1895, this new plan was presented in a referendum to the citizens of Kansas City. It passed, seven to one.¹⁵

The 1893 report of the Board of Park and Boulevard Commissioners of Kansas City spoke of the important role that parks would play on real estate values: "It is to the interest of the City and to every individual within it that all lands within the limits of this City be as fully and advantageously occupied as possible, and thereby become as valuable as possible. These results can be achieved only if lands are occupied and used for the purpose that they are naturally and therefore best adapted and if the City improvements be so planned and carried out as to justify and encourage the fullest use and highest possible development and improvement of all lands."

The commissioners believed that Kansas City had really missed an opportunity - as had many other cities with erratic growth - when the city neglected to plan around its own natural assets: "Fifteen or twenty years ago a plan might have been adopted that would have made this one of the most beautiful cities in the world. That plan would have involved withdrawing from private use and reserving for the use of the public many of the ravines and bluffs that are but poorly suited for private improvement but which if improved and maintained as public reservations would not only have laid the foundation for a magnificent park system but would thereby have vastly increased the value of adjoining lands. It is by no means too much to say that had such a policy been pursued the assessed valuation of lands within the limits of the city would be today far greater than it is."

The commissioners planned to make the new parks and boulevards the main organizing elements in the growth of Kansas City. And it worked. The park and boulevard system has played a central role in Kansas City's growth between 1893 and today (Figure 1-3).

An interesting twist to the decade-long battle came in 1896, when a fierce opponent of the parks movement, Colonel Thomas Swope, gave Kansas City 1,334 acres of pasture and woodland for park development. This property was four miles outside the city and at that time many people thought it was too far out to

become a viable park. By 1910, a parkway led right up to the new park, where two lakes and a zoo were already under construction.³⁵

The Park Board, in establishing criteria for new boulevards, declared that "The land that abuts such boulevard be of a character satisfactory and suitable for good residences."

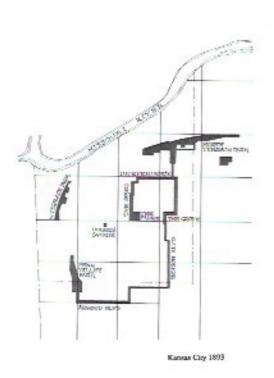
The real estate developer who took the best advantage of the parks and parkways was J.C. Nichols, who created Kansas City's Country Club district. Nichols and George Kessler, the park planner, worked together to expand one of the city's major boulevards, Ward Parkway.

The Park Board announced that unless the property along this new boulevard route was deeded to the city by the existing owners, improvements on it couldn't be made for ten years or more. Nichols donated 60 acres of the Ward Estate, which he was representing, for the construction of the boulevard and for playgrounds. Nichols was completely up front when he said that the Ward Investment

Company knew that this project would benefit its properties. And to benefit the public, he insisted that the widest part of the land remain near an existing, heavily populated neighborhood, providing space for playgrounds. The Kansas City Times noted: "The property owners who are working to draw the resident districts to the southwest part of the city want the boulevard now and are willing to give the land required if the Park Board assures them that the work will begin before new additions can be plotted on the proposed route."

Nichols understood the importance of landscape architecture, and fought hard to incorporate it into his new developments. He went to Europe frequently, and these trips influenced his residential designs — his Country Club district was inspired by Europe's beautiful city tradition. By combining sound real estate principles with new public parks and urban landscapes, Nichols became the most successful developer of his day.

Figure 1-3
The park and boulevard
system played a major
role in enhancing
property values and
creating new real estate
markets in Kansas City.





"It is an established fact, well known to dealers in real estate here," stated a 1910 report of
the Board of Parks and Boulevard Commissioners, "that during the past ten years many
thousands of people have been attracted to
Kansas City as a place of residence by her
fine exhibition of civic spirit, the most conspicuous product of which is her magnificent
parks and pleasure grounds — all this has
served not only to enhance real estate values
but to create a real estate market where none
existed before."²²

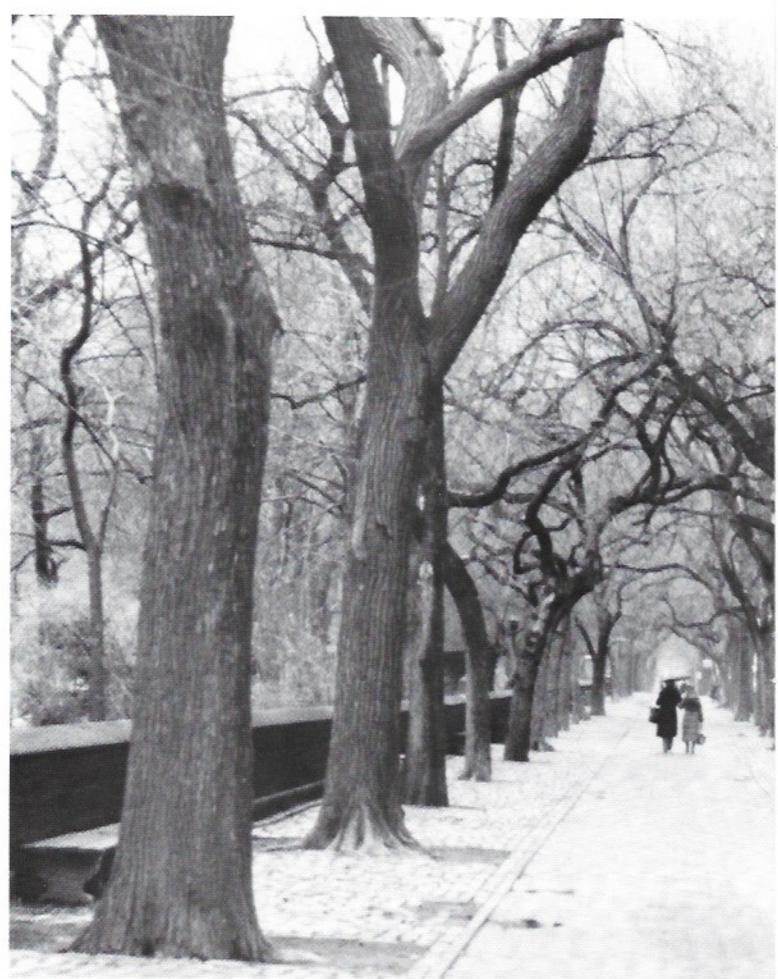
The report contained the results of a study, completed with the cooperation of the real estate community in Kansas City. The report concluded that since the creation of the parks and boulevards, the assessed value of real estate in the north and south park districts rose 43.78%.

A story about this report was published in *The Outlook*, a national weekly newspaper out of New York City: "Another striking instance of commercial value of the beauty of landscape has appeared in the development of a remarkable system of parks and boulevards that has been established in Kansas City, Missouri, within the last fifteen years.... While a system of parks and boulevards has cost tens of millions of dollars, the property fronting on these boulevards has been advanced by more than that amount. This statement is based on a careful investigation conducted with the cooperation of real estate dealers."

The Kansas City Star summed it up best:

"Kansas City has never had a complete city
plan, only its very comprehensive and broad
park and boulevard scheme, but this park and
driveway system, with the limitations of the
peculiar topography of the city, have automatically and naturally developed a city plan in so
far as the distribution of business, manufacturing and residents areas were concerned."

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Street trees enhance the value of adjacent property.



QUANTIFYING THE IMPACT OF OPEN SPACE AND EXPANDING THE CONCEPT

tudies by Frederick Law Olmsted and George E. Kessler projected that their new parks and parkways would increase real estate value. They anchored their projections with simplc calculations of the increased tax receipts from the properties surrounding these parks and parkways. Since then, both municipal governments and the academic community have been perfecting the process of quantifying the impacts of open space on real estate values. The first methods recorded the changes in sales prices and property tax assessments. As statistical techniques became more sophisticated, multiple regression analysis was applied, eliminating the influence of variables that were not related to parks, such as house size, type and location. Recently, researchers have used surveys to try to understand how real estate developers, home buyers and government assessors perceive the value of property. Surveys are useful because people's perceptions of relative worth, and their willingness to pay, are the basic elements in economics. A person's willingness to pay for

a piece of hypothetical property while answering a survey however, is probably different than the price they would be willing to pay if they were actually buying it.

Since the 1920's, the concept of blending open space with new development has taken many forms, from garden cities and downtown plazas to greenbelts and residential communities built around golf courses. All of these new projects preserved open space, and created more livable and beautiful environments. And the open space heightened the marketability of the projects and increased the value of adjacent property. Traditionally, open space had been used to stimulate growth. In today's rapidly expanding cities, however, greenbelts are being used to effectively limit growth. Either way, open space has always had a significant and beneficial impact on property values.

THE URBAN PARK —
A GREATER
UNDERSTANDING OF
ITS VALUE

nion County, New Jersey, commissioned a study on Warinanco Park in Elizabeth, New Jersey, to examine its economic impact on adjacent property values from 1922 to 1939. This study reported a striking 631.7% increase in the assessed value of properties within 1,300 feet of the park, at a time when the overall increase in Elizabeth property values was 256.7%. A later study reported that "In only 5 years the incremental tax revenues equalled the \$1,200,000 expenditure for acquisition and development of the park."

A study of land values near A.B. Davis Park in Lubbock, Texas, analyzed the sales prices of local housing between 1960 and 1965, and found there was a direct relationship between sale price and distance from the park; the closer to the park, the more valuable the property.

In 1974, the Regional Science Research
Institute in Philadelphia examined how 1,294acre Pennypack Park affected nearby real
estate. A multiple regression analysis was
used, to try to hold constant such variables as
type of house, year of sale, corner location,
etc. Pennypack Park was surrounded by residential areas of evenly distributed densities,
further reducing the number of characteristics
that might influence the research results. To
isolate, as precisely as possible, the value from
Pennypack Park, the study also ruled out such
things as whether or not a house was next to
retail areas, major highways, or any other
large open space.

The study included 336 properties in 16 different housing developments. The results supported the findings of earlier studies - that property value decreases the farther away it is from open space. At 40 feet, the park accounted for 33% of the land value. This dropped to 9% of the value at 1,000 feet and down to 4.2% at 2,500 feet. A net increase of \$3,391,000 in real estate value was directly attributed to the park. Each acre of parkland generated about \$2,600 in location rent. One interesting observation - properties with hackyards bordering the park had values slightly lower than properties a block away. Since the park wasn't a heavily used facility, researchers suggested that the decrease wasn't due to such things as noise or pedestrian traffic on the street, but more to property owners feeling vulnerable to people crossing their land when travelling to and from the park.5

In 1973, a study of five parks in Columbus, Ohio, found a decrease in the value of property across the street from heavily used parks which were developed for active recreation, such as baseball and swimming. In 1969 dollars, these properties sold for an average of 7% less than properties a block away. But properties facing "passive" parks sold for 7-23% more than property a block away.

A study of property values adjacent to four parks in Worchester, Massachusetts, confirmed both the decrease of property value as distance increased from the park, and that the degree of value depended on the type of park.7 The four Massachusetts parks were Elm Park, a large, landscaped park near the center of the city, with wooded areas and athletic fields; Greenwood Park, a small park with handball courts, baseball fields and a pool; Hadwin Park, a wooded, 50-acre area with picnic areas and tennis courts; and Lake Park, 78 acres of undeveloped woods with baseball fields and picnic areas. Using the Worchester Multiple Listing Service, researchers compiled a list of all properties, within 4,000 feet of each park, sold over the previous five years.

The study found that a house within 20 feet of a park was worth about \$2,675 more than a similar house 2,000 feet away from the park. After 2,000 feet, the park's influence became negligible. Overall, the 219 acres of parks generated \$349,195 of economic benefit. Researchers also found that natural landscapes created the highest values in adjacent property, although, characteristically, property next to active recreation facilities had slightly lower values. In this case the decrease was attributed to noise and pedestrian traffic. Property values one block away from the active parks, however, increased.

THE URBAN FOREST

he value of the urban green is not limited to city parks. Trees on residential streets account for a substantial increase in the value of adjacent property. Researchers in Athens, Georgia, studied the average sale prices of 844 single-family homes between 1978 and 1980.8 Using the Multiple Listing Service of the Athens-Clark County Board of Realtors, researchers found that homes landscaped with medium- and large-size trees of any species had a 3.5-4.5% higher sale price, or a \$1,475-\$1,750 increase in value. In 1978, the total increase in Athen's property tax revenue attributed to the urban forest was \$100,000. The researchers, who also used multiple regression analysis, pointed out that their figures were conservative compared to studies done in the early 1970's in Amherst, Massachusetts. The studies were based on surveys of real estate appraisers and homeowners, using photographs and written descriptions of houses. Without revealing actual sales prices, people were asked to estimate the prices of houses with differing amounts of trees.9 Hypothetical sales prices for houses landscaped with trees increased by about 7%.

A 1976 study that evaluated the effects of several different variables on homes in Manchester, Connecticut, found that street trees added about \$2,686, or 6%, to the sale price of a house.³⁹

Another, more recent study explored how "street quality" affected the tax assessment of properties in Cambridge, Massachusetts." Street quality was judged by characteristicssuch as the width of the street, volume of traffic, ease of parking, the presence of healthy trees and landscaping. From 1984 to 1987,

FIGURE 2-1. STREET QUALITY COMPONENTS

Priority	Excellent	Average	Poor
Trees	11	6	2
Sidewalk	6	3	2
Traffic	9	9	4
Street Parking	3	10	9
Density	6	10	10
Mix Land Use	3	14	11
Street Width	4	6	3
House Quality	4	11	7
Neighborhood	6	3	0
Landscape	5	1	1
Others	10	17	10

Table represents the number of times the catagory was mentioned by the interviewees.

Figure 2-1
Tax Assessors in
Cambridge rank
trees as their #1
priority in rating a
streat "excellent."

street quality ratings, a major factors in residential property assessments, accounted for up to 30% of a house's market value. In 1987, the average price for a single-family home was \$235,000. A regression model showed that depending on street quality, otherwise identical properties had about a \$70,000 difference in price.

When Cambridge tax assessors judge streets from "excellent" to "poor," street trees rank as their number-one priority in rating a street "excellent" (Figure 2-1). It seems a street can't be rated "excellent" unless it has trees. But while trees strongly benefit property values when other conditions on a street are basically good, they are less influential in upgrading the perception of streets that are basically in bad condition. To put it simply, trees make good blocks better.

Value increases are not just related to street trees, but also to a property's proximity to woods. The New York Times recently reported that developers who preserved vegetation, mostly because of building restrictions, later reported an increase in the value of their projects. Developers said they now understood the value of saving trees and other natural elements, because they had seen for themselves how these features enhance the marketing and sales prices of their units. Alvin Benjamin,

sales prices of their units. Alvin Benjamin, president of Benjamin Contracting Corp. of Garden City, New Jersey, said that the preservation of natural features in one of their recent projects construction costs went up on some units by about 15-20% — but the price of a unit cantilevered over woods was worth an additional premium of \$25,000-\$30,000.

William Schmergel, president of Schmergel Construction in Great Neck, New York, was building 56 town houses on a 12-acre site. "Premium lots sell first," he said in the article, "and trees sell the job." His two- and three-bedroom houses had prices ranging from \$215,000 to \$315,000 and the highest premium — \$25,000 — was placed on units that overlooked a 35-foot wide buffer of woods, ensuring privacy and appealing views. The article observed that "Builders say that buyers are now as concerned with the environment as they are with the house itself."

THE GARDEN CITY

n the 20th century, the effect of urban open space on real estate values came to be better understood and accepted.

Cities in the early 1900's were considered "the industrial cities," and concern over the harmful effects of this perception encouraged planners to try to create a new image for cities. Nature and parks became important components of this new image.

Ebenezer Howard, a British planner and true visionary, set forth the idea of "garden cities" in his book, Urban Cities of Tomorrow, published in 1898. His garden city was a master plan for industrial cities — which he felt should be ringed by a greenbelt of farms and

parks, forever preventing urban sprawl.14 Howard built two such towns, Letchworth and Welwyn, just north of London.

Lewis Mumford, a highly respected and progressive urban planner, thought much along these same lines. He believed that "A building ... is not a free standing, self-contained structure to be appraised on its aesthetic merits alone. It is but one element in a larger civic or landscape design." In 1923, Mumford joined the Regional Plan Association of America (RPAA) — a group of young architects, planners and environmentalists, eager to create new towns based on the theories of Ebenezer Howard. Other leading members of the RPAA were Clarence Stein, Henry Wright and Benton MacKaye. Together they conceived Sunnyside

Gardens in Queens, a garden city which provided working-class people with attractive housing (Figure 2-2). Then the RPAA developed suburban communities, such as Radburn in New Jersey, where people could see, get close to and enjoy open space. Mumford commented on the value of open space in these places; "Even when the architecture is as mediocre as that of Radburn, New Jersey, the aesthetic effect of the continuous inner park that binds the superblocks together is extraordinarily charming."48 The concept of using open space as an organizing element to create liveable communities was further expanded in new towns or greenbelt towns such as Greendale, Michigan; Reston, Virginia and Columbia, Maryland.

Figure 2-2
Incorporating
open space with
new development
increased the
desirability of the
"garden cities."
Sunnyside Gardens,
seen here in 1926,
was the first of
these developments
in the United States.



It's interesting to note that although there's been a fair amount of writing on both the concept and success of these planned communities, there are no comparative real estate studies documenting an increase in property values due to the open space. But the Sunnyside Foundation reports that the residents of Sunnyside Gardens feel strongly that their homes are worth more than other homes in the surrounding Sunnyside community. The Columbia Association, a civic group in Columbia, Maryland, has conducted visitor and resident surveys that imply that open space has definitely added to the perception of the housing value. However, there's no supportive statistical information comparing lot price, tax rate, or the cost of housing in these garden cities to similar sites in nearby communities. Research is needed to validate the assumption that the open space in garden cities or new towns makes the local real estate more. valuable.

GREENBELTS

estern cities began growing rapidly in the 1960's, and some serious rethinking had to be done. Officials in Boulder, Colorado, realized that the city's sudden growth was jeopardizing the open spaces and vistas that made Boulder a wonderful place to live. So they launched a huge campaign to preserve Boulder's natural areas by creating a greenbelt.

The concept of a greenbelt in Boulder wasn't a new one; as long ago as 1893, Frederick Law Olmsted encouraged the city to protect its mountain backdrop and waterways. In 1898, the city purchased Chautauqua Park, at the foot of Flagstaff Mountain.¹⁷ Later, in 1907, the city bought 1600 acres of land on the mountain itself from the federal government, and five years later bought an additional 1200 acres. The price was \$1.25 an acre.

But the main impetus for the greenhelt was that between 1950 and 1960, Boulder's population doubled. Local citizens formed an action group — PLAN BOULDER — and successfully campaigned for two bond issues that saved 160 acres threatened by housing development. In 1967, Boulder became the first American city to add four-tenths of one cent to its sales tax, for the purchase, management and care of open space. This measure passed by 61% in a general election, which was an incredible show of support from Boulder's taxpayers. In 1973, the city council established the Open Space Board of Trustees, to set the priorities and policies for expanding the greenbelt.

Today, Boulder's greenbelt (Figure 2-3) and parks cover 17,000 acres. Rather than exploit surrounding farmland, as was commonly done in the 1860's, Boulder preserved the farms outside the city and incorporated them into the open space system. A 1977 article in Urban Land stated: "The land, in most cases, is leased to tenant farmers on the share crop basis or at an established animal unit rental. Income from these leases is now approaching the total cost of maintenance and protection of these lands. It is our objective that these productive lands generate sufficient income to maintain the entire open space land ownership."18 Boulder's success can be an important model for many cities, where suburban sprawl and residential development are quickly destroying valuable farmland.

In 1978, researchers examined the value of property near the greenbelt in Boulder.¹⁸ Focussing on three areas, and using multiple regression analysis to hold constant all



Figure 2-3
Boulder's Greenbelt
was successful in
containing urban
sprawl while
increasing the value
and marketability
of adjacent
property.

possible variables, the study looked at two separate aspects of the greenbelt's impact. The first one — the view of the mountain backdrop — was considered a public benefit, because it could be enjoyed by all the residents in Boulder and not just the property owners. The second — the value of property near the greenbelt — benefitted only local property owners. The latter was considered a quasi-public good.

The research, published in Land Economics, showed that property values declined with distance from the greenbelt. There shows a \$4.20

FIGURE 2-4. VALUE OF THE AVERAGE HOUSE AND GREENBELT PROXIMITY

Walking Distance from Greenbelt (feet)	Average Value of House
30	\$54,379
1,000	\$50,348
1,283	\$49,172
2,000	\$46,192
3,200	\$41,206

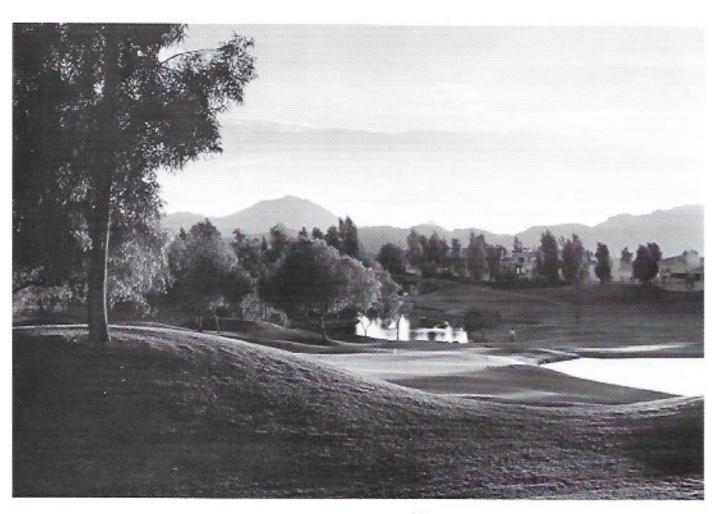
decrease in the price of a house for every foot it was away from the greenbelt (Figure 2-4). Property next to the greenbelt was 32% more valuable than properties 3,200 feet away. The Figure 2-5
To maximize the frontage of adjacent building sites, new communities such as Gainey Ranch in Scottsdale, Arizona created linear golf courses which functioned much like the parkways of the late 19th century.

value of open space was greater when people could see the greenbelt from their own windows and had access to the greenbelt in their own neighborhoods: "From a policy point of view an important implication of the above finding is that the neighborhood value of open space as reflected by an increase in nearby property values depends critically on the ability of private developers and urban planners to integrate neighborhood development and access to open space."

The preservation of land surrounding a city isn't unique to Boulder. For instance, Albuquerque, New Mexico, recently experienced a huge growth in population and local leaders began to fear for the city's quality of life. Recently a one-quarter-cent sales tax increase was approved by voters, targeted for land acquisition and quality of life improvements. The city has since spent \$26 million to preserve 7,200 acres of mountains.²¹

THE GOLF COURSE

olf-oriented development has been a hot item in the Sunbelt in the late 1970's and 1980's. Golf courses are the organizing feature of entire developments and serve as the



major marketing draw; in this regard, they are similar to traditional parks.²²

Gainey Ranch is an unfinished, 642-acre residential and resort community in Scottsdale, Arizona. The community is developed around a 27-hole private golf club that winds through the site (Figure 2-5). The project includes a resort hotel, retail space, office development and residences. The developer, Markland Properties Incorporated, decided that the golf course would be the unifying element of the entire project.

When it is completed in 1995, Gainey Ranch will contain about 2,000 homes on 264 acres, about 40% of the site. The landscape of the golf courses, designed with both the golfer and the property buyer in mind, are reflected in the landscaping of the adjacent residential community. The lakes and ponds on the golf courses, which add to the beauty of the scenery and the enjoyment of the game, are used for irrigation and storm water retention. The Wall Street Journal reported that golf courses were now being built primarily to attract people to high-priced developments.²³

One of the first such golf course projects,
Oak Tree, was developed in 1972 by
Landmark Lands Corporation in Edmund,
Oklahoma. Charles Barton, chief executive of
Landmark, said, "Golf at the highest level is
the best way to change the use of the property
and create value. It increases the value of the
land on the course and the value of the land
across the street. It changes the perception of
the neighborhood."

Geographers at Oklahoma State University point out that real estate development has actually transformed the geography of the American golf course. Golf courses were traditionally compact, with very little space between fairways, but most modern golf courses are sprawling, laid out in a linear fashion. Their design and impact is very similar to the parkways and boulevards of the late 1800's.

John Rooney, a professor at Oklahoma State University, said that golf courses can easily convert marginal land into prime land; "Merely being in a golf course community, even without a direct fairway view, can add more than 20% to the value of a home site, based on prices of comparable lots in the same community. In addition, being located next to the golf course can add another \$15,000 to \$20,000. And if the view includes a pond or other body of water, tack on still another \$15,000."

THE DOWNTOWN PLAZA

ncreasing the value of a new real estate project by including open space isn't limited to residential development. Many times open spaces have been used to brighten the image and boost the marketing of corporate real estate in cities. An early example, begun in the 1931 by John D. Rockefeller Jr., is Rockefeller Center, which has a central open space, the Channel Gardens a landscaped promenade of seasonal plant displays leading to a lively skating rink and restaurant - and four, formal rooftop gardens (Figure 2-6). The open space enhances the desirability of Rockefeller Center and recent reconstruction included reviving the rooftop gardens. The Channel Gardens are a big tourist attraction by themselves. The lighting of Rockefeller Center's enormous Christmas tree has become a sign in New York City, that the holiday season has begun. Many people who visit them and watch ice-skaters whirl

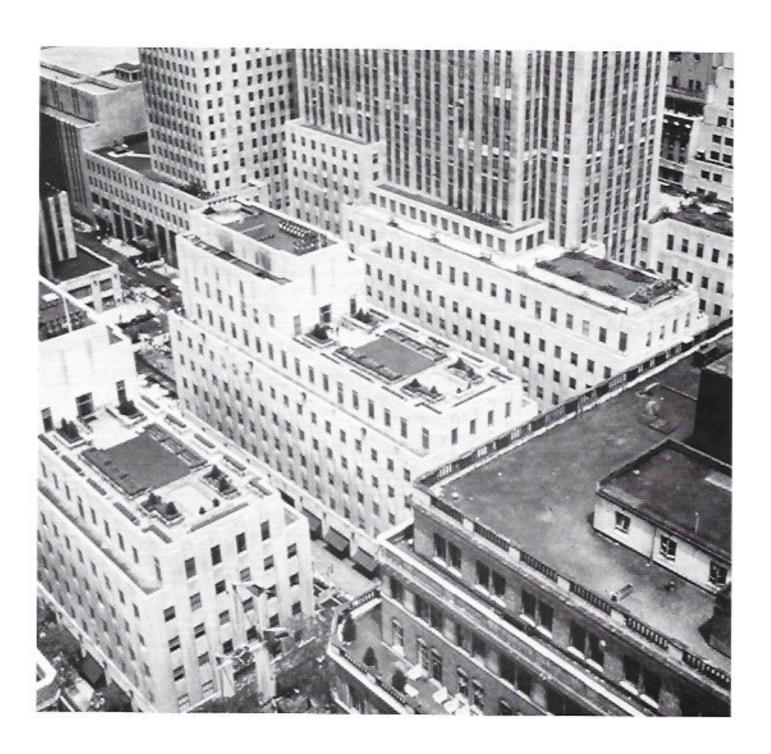


Figure 2-6
High quality rooftop
gardens are only
one element of the
many unique open
space features of
Rockefaller Center.

the rink think that the gardens are Rockefeller Center itself.

The Seagram Building on Park Avenue in New York City — designed by Mies van der Rohe and recently designated a landmark — is another example of successful corporate open space development. The plaza in front of the building is a bustling and vital place, an essential part of the architecture and function of the Seagram Building. William H. Whyte, an accomplished and creative urban geographer, often uses the plaza as a first-rate example of just how well corporate public open space can work. Unfortunately, this isn't the case in all downtown developments. None of the values and benefits described in this real estate monograph can be realized unless a site is well located, well designed and well maintained. To generate value, open space requires an investment. A well-groomed front lawn can increase the value of a home. But if it is overgrown with weeds, it can diminish the property value. Good design and proper plant selection are critical elements in the success of public open space. This is true for all open space development, from the traditional park to the downtown corporate plaza. Open space, too, can become an eyesore. In fact, the deterioration of open space may be the first sign that a city itself is deteriorating — so there's a strong argument for keeping open space systems in good condition.

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The potential value of views and public access to the water has stimulated new waterfront development projects, such as Baltimore's Inner Harbor.



THE RELATIONSHIP CONTINUES

he strong, beneficial relationship between open space and successful real estate development is evident in a number of creative projects taking place throughout America. Unlike the situation in the 19th century, municipal boundaries are fairly static and it's doubtful that cities will be expanding in the near future. The vacant urban waterfront - a product of rapid changes in the maritime, manufacturing and transportation industries - is the modern analog of the farmlands that surrounded growing cites in the 1860's, and residential and commercial developments are rapidly replacing manufacturing and maritime land use. The urban waterfront is the new frontier for real estate development and many innovative projects that combine open space and real estate development are taking place on waterfronts.

Greenways have joined golf courses as the modern equivalents of earlier parkways and boulevards. In addition, the views of parks, waterways and other natural features have recently been recognized as valuable assets in real estate marketing. Developers have also shown a renewed interest in under-utilized property in downtown areas and in the land surrounding existing city parks. Municipal parks have played a substantial role in stabilizing adjacent real estate and in many cases public investments in park restoration have increased the willingness of developers to assume a greater risk in new real estate projects in the surrounding community. Private investments in community greening programs are playing an ever-increasing role in the stabilization and revitalization of many low-income neighborhoods.

ON THE WATERFRONT

Battery Park City New York

t Battery Park City, New York State worked with New York City to create a residential and commercial community on landfill in lower Manhattan. This project, like the one that created a new residential neighborhood in Boston's Back Bay, would probably be impossible to replicate, given the constraints of contemporary environmental regulations. When the foundation for the World Trade Center was excavated in 1966, more than 25 acres of earth and debris were dumped across the street, right into the Hudson River. The process saved millions of dollars in carting costs and tipping fees and made new land uses possible along an abandoned stretch of the lower west side waterfront. In the early 1970's more landfill was added to complete the site. But simply creating the landfill did little to lure new real estate investment and the site remained vacant for years.

With many combined resources - the introduction of a creative new master plan, the rejuvenation of Manhattan's commercial real estate market and the financial muscle and vision of Olympia and York of Toronto. Canada — the Battery Park City development was launched, just as the authority established to develop the project was about to default on the initial bond. Today, Battery Park City is a physical and financial success, that has helped enhance the image of New York City. Over the next 20 years, Battery Park City is projected to generate approximately \$4 billion in total revenue for the city and state.2 The 92-acre commercial and residential development has approximately 30% of its land set aside for public parks and open spaces. "The Open space is the organizing element around which the buildings are arranged as a backdrop," explains Gary Deane, director of planning at the Battery Park City Authority,

The showcase of the project is a waterfront esplanade, which runs the entire length of the development. It connects historic Battery Park on the south to the newly proposed Hudson River Esplanade, planned to the north of the site. The Battery Park City open space system includes landscaped malls in low-scale residential communities, coves, atria and extensive street landscapes, as well as marinas, public art, ornamental gardens and public parks up to seven acres in size. The open space construction costs are financed by Battery Park City Authority revenues, generated by the lease of development sites within the project. The projects strict development guidelines which require specific construction materials, building setbacks and height restrictions complement both the architecture and the open space. In addition, Battery Park City has come up with an innovative management technique - establishing the Battery Park City Parks Corporation, to operate and maintain the public spaces. This corporation is financed by maintenance fees provided by residents of the adjacent buildings.3

It holds great promise as a management model for the future, but there may be some drawbacks. The Battery Park City residents, like all New Yorkers, pay taxes which fund the maintenance of the city park system. Residents of each building pay an additional surcharge to the Battery Park City Parks Corporation for the maintenance of the local public open space even though Battery Park City facilities are mapped as city parkland. This seems to be strengthening a proprietary attitude among the residents, who occasionally feel that people who don't live in Battery Park City shouldn't be using their parks. This phenomenon is not unique to Battery Park City and has been a recurring problem in a number of residential and corporate plazas that are public spaces maintained by private sponsors.

Figure 3-1

Increasing the

number of units

with river views enhanced both the

price and sales of apartments in the

Regatta at Battery

Park City.

Maintenance is one of the most crucial elements in the success of any open space. The desired level of maintenance at Battery Park City is very high, but the open spaces in the project haven't been finished, so the annual cost for maintaining the public spaces is yet to be determined. The residential community is also incomplete. It's difficult to say whether the Parks Corporation's revenue will be adequate to sustain the desired quality of maintenance when Battery Park City is complete. This creative management program will be tested over time and will hopefully prove a viable model for future public/private partnerships.

Corporation. The unique aspect of The Regatta is that the architects chose not to use the traditional double-loaded corridor design so commonly used in modern buildings, Organizing the units around the exterior side of the corridor, the designers increased the percentage of apartments with river views from approximately 60% to 80% (Figure 3-1). This innovative design increased construction costs but it appears that the developer was more than compensated for by the increased price for each unit and the fast pace of sales - the Regatta was one of the "hottest" properties in the New York City real estate market in 1989.

The Regatta

ne of the most interesting buildings in Battery Park City is The Regatta, designed by Gruzen Sampton Steinglass, Architects and Planners, for the Property Resources

Although Frank Linde, President of the Property Resources Corporation, would not provide specifics on the revenue increase from this site-sensitive design, he said that the change in configuration and resulting costs

were definitely worth it. He suggested that their desire to develop other waterfront properties within Battery Park City was a good indicator of the profitability of The Regatta.

In September 1989, the Battery Park City
Authority selected Property Resources
Corporation to develop a new 38-story luxury
condominium on Battery Park City's premier
waterfront site. They paid at least \$121 per
developable square foot for the site, which
will eventually contain 419 condominium
apartments with a spectacular view of New
York Harbor. As we have seen in Boulder,
Colorado, innovative designs that maximize
views of and proximity to, open space contribute most strongly to developer profits and
the municipal tax base.

The value of views has recently been studied in an overview of the value of property surrounding Puget Sound in Seattle, Washington. Properties with views of the Puget Sound or Lake Washington were found to have a higher market value then those without views and the research suggests that the amount of increased value depends on both the character and extent of the view.

THE DOWNTOWN PARKS

Union Square -New York City

n the late 1970's, Union Square Park, a traditional New York City park with a rich history, was in terrible shape. The facility was run down and it was overrun by drug dealing and other

anti-social activities. Klein's Department Store, right next to the park, was abandoned and the entire neighborhood was viewed as deteriorating,4 In 1985, The New York City Department of Parks and Recreation invested \$3.8 million in the first phase of Union Square Park's redevelopment. The following year, the Zeckendorf Company, encouraged by this municipal investment, began a \$200 million residential development on the entire block that had once housed Klein's. The former Commissioner of Parks and Recreation. Henry Stem, says: "There is no question but that the development of the Klein's site supported our successful effort to redevelop Union Square Park."7

In this case, a municipal investment in rehabilitating public open space - similar to the creation of city parks in the late 19th century provided the incentive that lured new development to the area that's now more desirable. increasing both the city tax base and the profits of the developer. The long-term impact of park rehabilitation has been the stabilization and rejuvenation of residential and commercial properties surrounding the park. And views of the park have enhanced the value of adjacent property (Figure 3-2). Arthur Zeckendorf, of Zeckendorf Company, stated: "Apartments with views of Union Square Park sell for 20% more than apartments of the same size that don't have views of the park."

The Halstead Property Company, in a summary of their 1989 Report on New York Real Estate, confirmed the value of a view: "The single amenity that has added the most value to a Manhattan apartment over the last year is a good park or river view. The premium New Yorkers paid for a view above the tree line climbed faster than any other amenity and allowed identical apartments to sell at as much as a 20% differential if one had a view and the other didn't. Halstead's New York tracked the price of apartments without a park or river view at an average of \$103,215 per room and

Figure 3-2
The revitalization of
Union Square Park
and the Zeckendorf
Towars show that
municipal and
private investments
are complimentary.



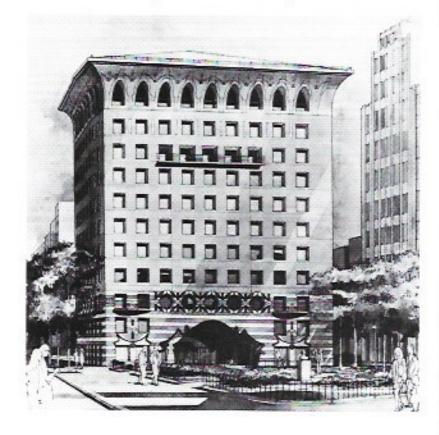
the price with a park or river view at \$176,833 per room, a 71% premium up from 69% the previous quarter."

The growing awareness of the value of views was described in a recent New York Times real estate article highlighting a host of amenities that influence the value of residential properties — views were clearly the most significant. For various properties surrounding Central Park, the article estimated that the premium for views of the park ranged from \$10,000 to \$700,000 depending on the size of the apartment and the type of view.¹⁰

Bowdoin Square -Boston

he Gunwyn Company, a successful
Cambridge-based real estate development organization, initiated the
restoration of a commercial building
in downtown Boston. The site was
across the street from a small park, dedicated
to the memory of Cardinal Cushing. The
Boston Redevelopment Authority, the agency
with jurisdiction over the park, had identified
a private foundation interested in funding the
park's reconstruction. During the redesign of
the building, the entrance was relocated
around the corner, to face the park. In 1988,
plans to reconstruct the park were sidetracked

Figure 3-3
In redeveloping an office building at Bowdoin Square, the Gunwyn Company moved the building's entrance to make Cardinal Cushing Park the "front door" for the project.



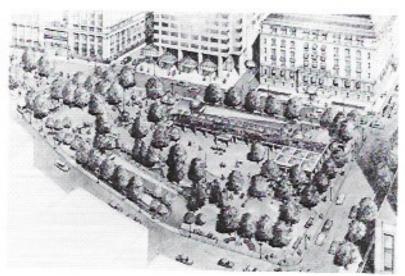
when the foundation told the Boston Redevelopment Authority that it couldn't fund the reconstruction. And there was no money for the project in the city budget.

But Graham Gund, chairman of Gunwyn Company, was determined to create a "front door" for his new project. Gund believes that "Buildings, like sculpture, benefit from an open surround. The green space afforded by the revitalization of Cardinal Cushing Park is not only a gift to the City and its citizens but an enhancement for the buildings around. In an urban environment in particular, equal importance should be given to the creation of the object and the landscape. Green space opens up the streetscape to light and air and provides a pedestrian precinct, sometime sanctuary, "to The Gunwyn Company donated \$285,000 for the reconstruction of Cardinal Cushing Park (Figure 3-3). In October 1989, a gala celebration of the park's successful reconstruction was attended by many leaders in the environmental, civic and development communities, including Cardinal Law and the Boston Park Commissioner.

Post Office Square -Boston

n the early 1980's, a group of Boston's business leaders, led by Norman Leventhal, chairman of the Beacon Companies, established an urban development company to create a new park in the center of the city's financial district. This company, Friends of Post Office Square, worked with the city government to acquire a full block site, which was owned by the city and occupied by a deteriorating threestory parking garage. Friends raised \$80,000,000 in equity and debt, which is now being used to raze the old garage and build a new seven-story underground garage (1400 spaces), with a 1.5-acre public park at grade. Figure 3-4 shows the original condition of the

Before



After

Figure 3-4 Replacing a three story garage with an underground parking facility and park at Post Office Square has encouraged investments in building redesign by local property owners in Boston's downtown financial district.

site and a model of the facility that's currently under construction. When financing for the project is retired, in about 35 years, the park and garage will revert to municipal ownership.

The project has already generated new investments by local property owners. A number of the adjacent building owners have independently hired some of Boston's most prominent architects to modify the ground floor of their buildings so they better relate to the future park.

IN THE NEIGHBORHOODS

Philadelphia Green

he Pennsylvania Horticultural Society — the oldest horticultural society in the United States - inaugurated its community gardening program, Philadelphia Green, in 1974, The program has evolved into a comprehensive effort that enhances the quality of life in low- and moderate-income neighborhoods all over the city, by building community gardens, neighborhood parks and planting street trees. Philadelphia Green now has 26 full-time and eight part time staff working on more than 285 projects throughout Philadelphia. Since its inception, Philadelphia Green has raised and spent \$8.8 million. Their funds are provided by foundations, banks, corporations and individuals, as well as by the City of Philadelphia." The success of the program is largely due to a cooperative approach to neighborhood redevelopment; involving local residents in the design, construction, programming and maintenance of a project.

In the 1980's, Philadelphia Green focused its efforts on strengthening a number of residential neighborhoods in North Philadelphia, an area badly hit by urban blight (Figure 3-5). Its comprehensive program, called Greene Countrie Townes, targeted open space improvements to specific neighborhoods for two to four years. Francisville, a 30-block, low-income community in North Philadelphia, was dedicated as a Greene Countrie Towne in 1987.

Over three years, Philadelphia Green invested about \$332,800 in materials, staff, construction and labor, to help community residents plant 25 community gardens, 20 garden blocks and eight blocks of street trees. This investment was matched by thousands of hours of local volunteer labor and several more blocks of street trees were planted by the City of Philadelphia. With the active involvement of local residents, Philadelphia Green has improved North Philadelphia's streets, vacant lots and backyards. The Greene Countrie Towne program has helped to stabilize and revitalize Francisville and three other lowincome neighborhoods in North Philadelphia.

Community gardening programs are thriving in Boston, Scattle, San Francisco, Asheville, Louisville, Denver, Austin, Washington D.C., St. Louis, Kansas City and more than 70 other American cities. Quite simply, the underlying construct that determines the real estate value is what someone is willing to pay for a piece of property. When a neighborhood looks better, it's worth more to the home owner, the perspective buyer and the tax assessor. Unfortunately, there have been very few studies on the economic benefits of these programs. It's obvious to many that new community gardens and parks have helped to stabilize and revitalize many inner-city neighborhoods, but the research that quantifies the value of these projects has yet to be initiated.

Figure 3-5
The Pennsylvania
Horticultural
Society's Green
Countrie Townes
have helped to
stabilize and
revitalize lowincome neighborhoods in North
Philadelphia.



Central Brooklyn

he recent observations of field researchers, conducting a study of existing zoning in the areas surrounding city parks, seem to confirm the perception that traditional parks have a stabilizing effect in low-income areas. Planners from Michael Kwartler and Associates are currently preparing a survey of properties around a number of municipal parks in New York City. They noticed that two parks in central Brooklyn appeared to minimize the devastating effects of disinvestment, abandonment and arson on the adjacent property. They observed that in neighborhoods where whole blocks had been cleared. or contained buildings that were mostly abandoned, blocks facing these parks still remained intact. Commenting on Martin Luther King Park in East New York, Mr. Kwartler said: "It is clear that the park represented an amenity and an anchor, stabilizing the adjacent housing in a neighborhood which has undergone radical decline."13

GREENWAYS

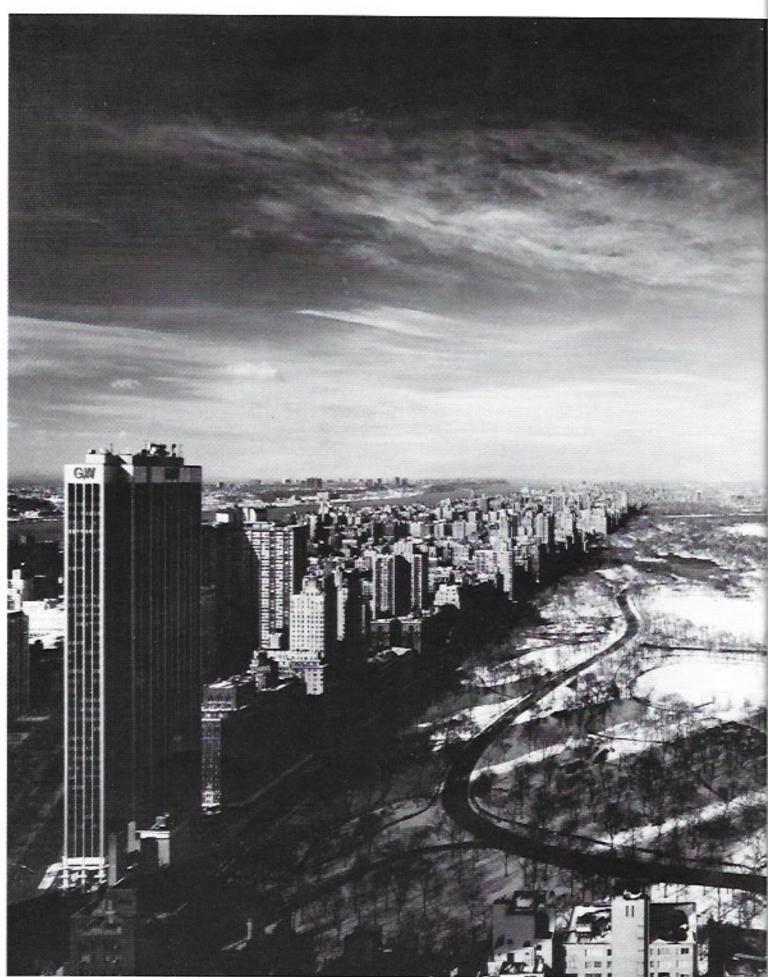
he President's Commission on Americans Outdoors identified a new type of open space during their nation-wide study of America's open spaces and open space uses greenways." These linear parks — which link natural, cultural and historic features with landscape corridors, hiking trails and bicycle and pedestrian paths — were discovered all across the country.

In 1987, the engineering department of the Office for Planning in Seattle, Washington, examined the concerns of local residents that the creation of a new trail would lead to an increase in crime and a decrease in property values. The department studied the Burke-Gilman trail, a 12.1-mile route on an abandoned railroad right-of-way in northeast Seattle that connects six parks, a university and several commercial districts and neighborhoods. Built in 1978, it was used by about 750,000 people annually in 1987.

After interviewing residents, real estate professionals and the police, the engineering department concluded that no drop in property values or increase in crime could be attributed to the trail - and, in the surrounding area, property values actually rose slightly: "Property near, but not immediately adjacent to the Burke-Gilman Trail, is significantly easier to sell and, according to real estate agents, sells for an average of six percent more as a result of its proximity to the trail."15 Supporting earlier studies which documented the reduced value of property near active recreation facilities, the department found that "property immediately adjacent to the trail, however, is only slightly easier to sell," The research uncovered an interesting phenomenon about residents' perceptions: "Residents who bought their homes after the trail was opened are more likely to view the trail as a positive factor that increases the value of their home. Long-term residents who bought their home prior to the opening of the trail are generally less likely to view the trail as an economic asset."16

A master's candidate at Kansas State University in Manhattan, Kansas, came to similar conclusions in 1988, using an interview methodology similar to the one used in the Burke-Gilman study. He found that people had a more positive attitude about trails once they had actually been built; that a majority of property owners felt that trails didn't lower their property values; and that new property owners were more likely to see trails as enhancing the marketability of their homes.¹⁷

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Shadow simulation of the proposed redevelopment of the Coliseum site.



LOOKING TOWARD THE FUTURE

he economic value of urban open space to the real estate industry and the municipal tax base has been apparent for over a century. All of the examples in this monograph demonstrate a single, unerring fact - property next to open space is worth more than property that is not. This is the principal reason why the traditional parks of the 19th century are being restored and refurbished by both city governments and the private sector in the late 20th century. Open space lured development to the farmland beyond the cities in the 1860's. Today, open space is helping to bring development back to the urban waterfront. The parkway and boulevard concept reappears as the 20th century golf course communities and greenways that are being built throughout the country.

The relationship between urban open space and real estate development must be nurtured. We must protect urban open space from excessive exploitation which will diminish its value to the general public and the real estate industry. Attempts to overdevelop properties adjacent to parks and waterways or restrict access to public space to maximize individual profit are causing concern for the future. The working partnership between the government, business and civic community, which has evolved over the past century, has resulted in an urban open space system that is increasingly important in the social and economic life of American cities. By strengthening this partnership we can insure that the system will continue to flourish into the 21st century.

CAUSE FOR CAUTION

he relationship between open space and real estate development has been mutually beneficial, but a number of recent events warn of potential difficulties in the future. One of the biggest problems facing municipal governments today is the stunning demographic and economic changes that have forced cities to respond to, rather than direct urban redevelopment. For many cities, land is the most marketable asset they have. So much land reverted to municipal ownership, as a result of abandonment and subsequent tax foreclosures, that many cities now have huge inventories of property in public ownership. Instead of viewing the resource as providing a unique opportunity to sculpt a livable city, government agencies are often selling the property piecemeal, responding to developers' requests for prime sites instead of planning for the future.

This lack of municipal vision and stewardship has resulted in overdevelopment in many affluent neighborhoods and in downtown business districts. This overdevelopment is straining the capacity of city infrastructure in these areas, such as mass transit, water and power supplies and especially, sewage treatment and waste disposal systems while the infrastructure in other parts of the city is underutilized. Also, there is growing understanding that increased density can damage the image of traditional neighborhoods.

This problem of overdevelopment is particularly apparent when the properties are next to public open space. The negative impact of this phenomenon can be seen in overscaled projects in both Boston and New York, which were supported by the city government and conceived and presented by the same developer. Park Plaza was a proposal for a 50-story tower across the street from the Boston Common. The plan was strenuously opposed and ultimately defeated by civic groups, especially those from the Back Bay and Beacon Hill, who felt that such an enormous building would diminish public enjoyment and the physical integrity of the Common. The structure that now occupies the site rises from seven to 12 stories above the Common, complementing both the Common and the surrounding neighborhood.1

Recently New York City's civic community was similarly galvanized in an effort to oppose the overscaled redevelopment of the Coliscum site at the southwest corner of Central Park. This time, the city agencies which controlled the site required that all redevelopment proposals assume a 20% increase in the existing site zoning. The building, proposed by the same developer whose Park Plaza proposal was dismissed in Boston, was 59 stories (925) feet) and contained more square footage than the Empire State Building. The civic community argued that the impact on the park would be devastating and the city government subsequently changed the over-ambitious guidelines that encouraged the plan. New proposals such as these have the potential to kill the "goose that laid the golden egg" by overshadowing

parks, overcrowding streets, increasing surface wind speeds and degrading the image and importance of public open spaces.

There are problems with privately developed and operated public open space, such as plazas and atria that must be addressed as well. In some cases, residential development has had a chilling effect on the public use of adjacent open space because some residents view these public spaces as private parks. A more harmful problem however, is poor siting and design, which discourages public use of an open space. In addition, the lack of maintenance can inhibit public use and detract from the aesthetic quality of surrounding properties, As these factors make a space undesirable to the general public, it is often adopted by those who feel comfortable out of the public eye, such as drug dealers and users.

Property managers often respond either by constructing restaurants or other private facilities that remove the space from public use or by restricting access and removing benches and other amenities. This does little to dissuade anti-social activity and further diminishes the image and value of the surrounding property. Redesigning these sites, introducing programmed activities and insuring adequate maintenance will increase public use of and support for these open spaces. This is the only solution that will protect the public's interest and maintain the value of the space to adjacent owners.

There is reason to re-examine the underlying principle that allows these privately supported public spaces to be built. In a cost-benefit analysis of incentive zoning, the construction costs of downtown plazas, built from 1961-1973, were compared to the developers' returns on these investments. For each dollar a developer invested in a public plaza, he received \$48 in income from the extra space that the city provided in zoning bonuses.² There is a growing perception that the public

benefit of certain open space zoning bonuses is questionable. Although crowded downtown areas gain needed public open spaces, the cost to the city is often much, much higher than it would be if they were created without incentive zoning.

This problem is still with us. The Comptroller of New York State recently analyzed 10 projects where the city received public amenities by increasing density. The additional floor area allowed in exchange for public space generated \$100 million in increased revenue for the developers. In return the city received \$5 million for public improvements.3 It's better than 48 to 1, but not much. Battery Park City seems to hold more promise as a model for future public/private partnerships: a master plan guarantees a fixed amount of open space; design guidelines determine the aesthetics of the parks; and a percentage of lease income is set aside for building parks. In addition, the development's innovative public/private management program may provide answers to long-term management.

Lastly, using the promise of new open space to increase public acceptance of large scale development projects is a growing problem. A recent advertisement by a successful New York City developer shows the derelict railroad yards on Manhattan's Upper West Side and a rendering of the residential and commercial project that the developer proposes to replace it. Although the esplanade and all the other public open space included in the proposal comprise only 15-20% of the project, the advertisement presents the open space as a predominant land use. The elevated West Side Highway, which carries approximately 80,000 cars a day, directly over major portions of the public space, is barely perceptible. So is the proposed 14 million square feet of residential and commercial development. As a result, local residents may get the impression that the purpose of the project is to provide what they desperately need

For over a decade, this has been a West Side eyesore.



Here's what Westsiders will experience at Trump City: life on the Hudson, the way it should always be.



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TRUMP CTTY

Figure 4-1
Advertising
campaigns for
proposed real estate
developments often
focus attention on
the open spaces
they provide.

 public access to an improved and delightful waterfront (Figure 4-1).

The role of open space in real estate development has been rediscovered in recent years. Open spaces must be well planned, well designed, well constructed and then adequately maintained and programmed to provide the greatest benefits to city residents and the urban economy. They must also be protected from exploitation that maximizes private gain and diminishes public benefit.

STRENGTHENING THE PARTNERSHIP

ity, state and federal financing is the basic building block of our public open space system. Traditionally, cities invested in both property acquisition and improvements and received a return on this investment from real estate tax revenues which constitute a major portion of most municipal budgets. Private philanthropy has helped to create urban open spaces and its continued importance is evident in community gardens and the redevelopment of public parks, such as Boston's Cardinal Cushing Park. Private investment can complement but never substitute for public investment. We must protect the public interest, Community involvement is playing an increasingly important role in the stewardship of public open spaces, from community gardens to traditional parks and the preservation of our remaining natural heritage.

Three parties, local government, the business community and the public are responsible for and rewarded by, well designed and maintained urban open spaces. To benefit from the partnership, they all must work together to insure the continued success of the urban open space system. Local governments must shoulder the primary burden of open space planning, provision and management. In 1987, Seattle, New York City, and Boston completed new citywide open space policies and plans. These initiatives demonstrate that today's government officials understand the needs of their citizens as well as the need for greener cities,

Corporations must participate in the financing and management of urban open space to realize the maximum benefit from their investments. More and more, the real estate community is realizing that overdevelopment is had for business. But some real estate developers have responded to increased public participation in the development process by proposing outrageously large projects, anticipating a reduction in size during the public debate.

Community organizations have responded to large-scale real estate proposals and poorly planned urban redevelopment efforts by blocking them, using environmental laws and public review powers established since the 1960's. Many potentially damaging projects have been stopped, including highways, tunnels, housing projects, landfills and waste disposal schemes. Civic organizations that have successfully stopped inappropriate development are now troubled that mastering environmental laws and the public process hasn't given them a greater role in planning and implementing new projects. Their legitimate role in the partnership must be recognized and respected by business and government to sustain urban redevelopment.

If the partnership isn't strengthened, the resulting paralysis will seriously jeopardize the future of cities and waste millions of dollars as well as squander creative talent and energy. Cities are beginning to see that a lack of planning results in tremendous financial burdens. Disproportionate development patterns can severely impair a city's infrastructure capacity and quality of life. Public open space provision and management is a government responsibility that benefits both the business community and local residents. Perhaps open space is a good place to begin comprehensive planning and cooperative action - all the successes described in this document are the result of both planning and cooperation.

Right now, cities and their adjacent suburbs are fiercely competing for new real estate development, believing that it's the only way to strengthen their local tax bases. But this competition has to change to cooperation, to ensure a balanced redevelopment of metropolitan regions, that strengthens urban centers and eases development pressures in the suburbs. Open space enhances the quality and value of the built environment. Open space is good planning, good politics and good business.

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