June 2005

Up-Zoning New York City's Mixed Use Neighborhoods : Property-Led Economic Development and the Anatomy of a Planning Dilemma

Laura Wolf-Powers
University of Pennsylvania, lwolfpowers@gc.cuny.edu

Postprint version. Published in *Journal of Planning, Education and Research*, Volume 24, Issue 4, June 2005, pages 379-393.
Publisher URL: http://jpe.sagepub.com/cgi/reprint/24/4/379

Up-Zoning New York City's Mixed Use Neighborhoods : Property-Led Economic Development and the Anatomy of a Planning Dilemma

Abstract

This article examines land use policy and real estate market activity in the 1990s in two mixed use industrial neighborhoods on New York City's East River. Based on case studies of Greenpoint-Williamsburg in Brooklyn and Long Island City in Queens, it finds that a strong adherence on the part of public officials to the principle of highest and best use, together with an incremental approach to planning and land use regulation, has contributed to opportunistic development and industrial displacement in these areas. The question of whether this trajectory is in the interests of the public as a whole remains the subject of fierce debate in the city's planning community and beyond. The article contributes to the literature on property-led economic development in central cities by engaging with the complex task of planners charged with regulating areas that not only are logical sites for commercial and residential expansion but which also serve as niches for lower yielding uses such as light industry.

Comments

Postprint version. Published in *Journal of Planning, Education and Research*, Volume 24, Issue 4, June 2005, pages 379-393.
Publisher URL: http://jpe.sagepub.com/cgi/reprint/24/4/379

Up-Zoning New York City's Mixed Use Neighborhoods : Property-Led Economic Development and the Anatomy of a Planning Dilemma

By Laura Wolf-Powers

Assistant Professor

Graduate Center for Planning and the environment

School of Architecture

Pratt Institute

200 Willoughby Avenue

Brooklyn, NY 11205

w: 718-300-4323

h: 718-499-9836

lwolfpow@pratt.edu

Biographical note:

Laura Wolf-Powers is an Assistant Professor at the Graduate Center for Planning and the Environment in the School of Architecture at the Pratt Institute, Brooklyn, NY. Her research focuses on employment and economic development policy and the politics of planning.

ABSTRACT
This article examines land use policy and real estate market activity in the 1990s in two mixed use industrial neighborhoods on New York City's East River. Based on case studies of Greenpoint-Williamsburg in Brooklyn and Long Island City in Queens, it finds that a strong adherence on the part of public officials to the principle of highest and best use, together with an incremental approach to planning and land use regulation, has contributed to opportunistic development and industrial displacement in these areas. The question of whether this trajectory is in the interests of the public as a whole remains the subject of fierce debate in the city's planning community and beyond. The article contributes to the literature on property-led economic development in central cities by engaging with the complex task of planners charged with regulating areas that not only are logical sites for commercial and residential expansion but which also serve as niches for lower-yielding uses such as light industry.

I. Introduction

Property development is a key economic growth strategy for U.S. cities. From the 1950s through the 1970s, facing decentralization and disinvestment, local governments relied on eminent domain and federal subsidy to catalyze commercial, retail and residential construction in urban cores (see Hall 1996, Mollenkopf 1983, Logan and Molotch 1989). With the fading of the national government from the urban policy stage in more recent decades, cities continue to control land's development potential through the legal mechanisms of use and bulk zoning, and they maintain the ability to liberate the dormant value of property by providing infrastructure and public goods. Land use regulation, together with access to low-interest construction capital, remains a crucial tool in the urban economic development toolkit. (see Healey 1990, Weber 2002). This is particularly true for economic development officials in global or world cities which specialize in internationally exported entertainment, finance and advanced business services and where access to central land is extremely valuable (Castells 1996, Fainstein 2001).

Where agglomeration and centrality are crucial aspects of a city's competitive advantage, one finds strong evidence supporting the precept that markets in land favor users who produce the highest economic return per square foot of built space. However, market forces do not automatically yield an intensity or mix of land uses that is broadly optimal: this was first determined in the years before comprehensive zoning resolutions were promulgated, a time when unregulated market activity threatened both city-dwellers' quality of life and the productivity of urban land (see Abeles 1989, Fischler 2000). Land use planners, both by placing controls on use and density in individual districts and by planning comprehensively for the development of a community or region as a whole, are seen to temper and guide the market in ways that serve the long-term economic and social interests of the city's population (Heilbrun 1974, Kaiser and Godschalk 2000, Meck et al. 2000).

This article contributes to the literature on urban economic development planning by elucidating a contemporary dilemma faced by land use planners, especially those working in global cities – the dilemma of how to govern the use of sought-after land in mixed used areas near central business districts (CBDs) that not only are logical sites for commercial and luxury residential expansion but which (because of their proximity to markets and their unique agglomerative character) also constitute prime niches for specialty manufacturing, light industry and arts-related establishments. It does this by examining land use policy and real estate market activity in two mixed use neighborhoods on New York City's East River waterfront as they have unfolded in the past decade. On the basis of two case studies, one in Greenpoint/Williamsburg in Brooklyn and the other in Long Island City in Queens, it concludes that during the economic boom of the middle and late 1990s, opportunistic land purchases and property development outside the parameters of the zoning code precipitated and accelerated the shrinkage of industrial enclaves that the city had identified as viable in the early 1990s. City planners' passive support of deindustrialization, the article contends, stems from their allegiance to property-led economic development policies as well as from a conviction that it is unproblematic to imagine an urban economy based entirely on tourism, advanced services, and retail. While these stances have gone largely unquestioned in mainstream discourse, the case studies in this article suggest that they bear further examination.

The market forces at work in these urban transformations, as well as the types of industry concerned, were distinct in the two cases examined. The situations are linked, however, in that during this period, the role of city planners in guiding development came under considerable scrutiny and extended beyond the city's planning establishment. In this context, both retrospective and prospective empirical debates were waged. The retrospective debate concerned the question of whether there existed a causal connection between industrial decline and public support, both tacit and explicit, for property-led economic development in these areas. The prospective debate, in contrast, centered on the question of whether, regardless of public policy's role, the mix of land uses most likely to result from property-led development would produce a stable or equitable urban economy in the long term.

After describing the data and methods used, the article summarizes a debate in the planning and political economy literatures about the role of city planning professionals in property-led economic development. It then discusses two contemporary cases in which industrial land in mixed use areas near the midtown Manhattan CBD is being “up-zoned” to accommodate high-density residential and/or commercial development. In each case, ambiguously defined and poorly enforced land use regulations contributed to property speculation and the displacement of firms in what had been healthy light industrial districts, contributing to a shift in the city’s economy away from industrial employment and toward an even more marked dominance of white-collar and service functions. We then turn to a discussion of the debates these re-zonings have prompted concerning both the land use planning process and the nature of contemporary “global city” economies.

II. Data and Methods

The data that form the basis of the article are case study documentations of two re-zonings – one in Brooklyn, the other in Queens, both on the East River waterfront – which have been proposed by the New York City’s Department of City Planning and which are in process as of this writing. In addition to first-hand notes from briefing meetings and public hearings, the case studies were compiled from official documents, statements by representatives of city agencies and interviews with neighborhood and citywide stakeholders, many of whom chose not to be directly identified. Economic trends data on the city of New York and its employed population (drawing both on Bureau of Economic

Analysis data and the results of the 2002 Housing Vacancy Survey) also contributed to the case studies, as did documents produced by advocacy organizations ranging from the group promoting New York's candidacy to host the 2012 Olympics to groups representing land users who stand to be displaced if the re-zonings are approved. The method is primarily interpretive: the article attempts to illuminate the interrelated economic and political dynamics surrounding the trend toward the transformation of waterfront mixed use neighborhoods to communities that are primarily residential and/or commercial in character, and to use that understanding to reflect on the position of land use planners in global cities where central land is highly valuable and highly contested.

III. Property-Led Development and Use Zoning

Property-led urban economic development may be defined as a public sector strategy to encourage economic growth within a central-city jurisdiction by creating the conditions under which real estate investors are drawn to and can extract value from a place (Healey 1990, Fainstein 2001, Weber 2002). Shoring up the value of central land has been of concern to urban governing coalitions since metropolitan decentralization first began occurring in the 1920s (Beauregard 1993, Fogelson 2003), and while growth coalitions initially engaged primarily in promotion and boosterism, they soon drew on federal government funds for condemnation, assemblage and construction, first through New Deal programs and then through the 1949 Housing Act. In the mid-1970s, however, the federal government began a gradual withdrawal of financial support for urban physical redevelopment. As the federal retreat reached an apotheosis during the administration of Ronald Reagan in the 1980s, efforts to encourage property redevelopment by the private sector took center stage (Hall 1988, Fainstein and Fainstein 1989, Squires 1991), where they remain to this day. Development of this nature is attractive for officials in a climate where fiscal resources are tight, because it relies on private investment, produces immediately visible results ("cranes on the skyline," according to Healey 1990, 11) and can be accomplished through incremental, entrepreneurial planning as opposed to a rational comprehensive approach (Fainstein 1991, Turok 1992, Weber 2002). Additionally, the local government planner's toolkit, which includes development controls and property tax incentives, is well adapted to this strategy, and the local government, because of its reliance on real estate taxes, benefits more than do other levels of government from the revenues generated by land development. Linda Davidoff, a prominent actor in New York City's civil sector, describes property development as "in some ways the basic industry of New York City" (as quoted in Fainstein 2001, 27).

Planning scholars are divided empirically and ideologically about the implications of property-led development for urban economies. One group portrays successful property-centered strategies as both a boon to struggling cities and a testament to planners' innovation and skill under the duress of the New Federalism (Frieden and Sagalyn 1991, Garvin 2002). In this narrative, land use planners and development officials are local heroes, navigating among disparate interest groups to make possible the land deals that result in revenue-generating and amenity-creating development. That such development is in the interest of the urban economy as a whole goes unquestioned. In her work on the redevelopment of New York City's Times Square, Sagalyn (2001) suggests that the office towers built there in the mid-1990s constitute a kind of public works project:

> Large-scale projects require enormous political capital and an equal amount of persistence. Persistence is needed to surmount the inevitable opposition

> from varied interest groups, the certain litigation, and the procedural demands for public reviews absent during the Moses era of big public-works projects. The Times Square saga has made visible to the public at large what development officials in the post-Moses era have taken as a given: Successful execution of a large-scale public works project means finessing the inherent political gamble of possible failure…(2001, 473).

In contrast, radical urban theorists see property-based economic development as a malign, even violent expression of neo-liberalism and elitism. According to these authors, urban officials with the power to regulate development and land use have been enlisted to produce a socio-spatial structure that supports the aims of property capitalists (N. Smith 1986, 2002, Feagin and Parker 1990, Mele 2000). The fulcrum idea of the growth machine thesis (Molotch 1976, Logan and Molotch 1987) is the concept that government actors collaborate with and subsidize rentier elites in order to increase land value and land revenue without regard for the negative effects of property speculation and displacement on poor and middle-class city-dwellers. Land market dynamics, “lubricated by state donations,” says Smith, advance and diffuse harmful forces of gentrification. In this context, urban policy

> no longer aspires to guide or regulate the direction of economic growth so much as to fit itself to the grooves already established by the market in search of the highest returns (2002, 94, 99).

A third body of work on property-led development, while not as established as what I will call the “celebration” and “indictment” paradigms, portrays planners as neither civic innovators nor as agents of a co-opted state but rather as parties to a structural dilemma. While growth machine theory implies that public officials are largely unconflicted about governing cities in which land and buildings operate as pure commodities, practice-oriented work by such researchers as Clavel (1986), Clavel and Krumholz (1994) and Fainstein (2001) suggests that particularly under progressive urban regimes, planners may use their regulatory power to de-commodify space and extract broad-based benefits. In this context, however, planning professionals have a continuous and daunting challenge: to mitigate the market's excesses and distribute the benefits of economic growth to a wide public without hampering development or regulating land into unprofitability. This task is made especially complex by the combination of capital mobility and fiscal dependency on land values at the local level.

The discourses described above raise specific questions both about the nature of planning and the nature of cities. First, property-led development in its post-1980 form is characterized by fundamentally market-driven, opportunistic modes of planning. While some embrace this signal of new flexibility in urban governance, some ask whether, despite planners' public-minded intentions, the essence of the profession is betrayed when the ideal of comprehensive planning is supplanted by a "project-based" model that closely tracks practice in the for-profit sector (Swanstrom 1987, Fainstein 1991). Second, a strategic question arises with respect to instances where a market approach dictates that high-yielding land uses supplant marginal or low-yielding ones as a matter of right.[1] Property-led economic development hews closely to the philosophy that any given parcel of land should be put to its highest and best use, but this principle, applied over and over, may create diseconomies for a city as a whole in the long term. If the public planner's function is to regulate land in the interest of the wider community, and with a comprehensive vision for urban development in mind, is his or her responsibility fulfilled in every instance by promoting the most lucrative use for a given district or parcel? Are there instances in which planners serve the common interest by promulgating controls that effectively shield lower-yielding activities from market forces? And if so, what are those instances – what set of conditions triggers an intervention to protect a low-yielding use pattern from the encroachment of the "higher and better," much as perceived threats to public health trigger density and height controls?

While theoretically applicable to zoning regulations governing any low-rent land use (low-priced housing, industry and spaces occupied by non-profit institutions), these questions are dealt with in this article in reference to the "up-zoning" of industrial land to accommodate commercial and residential expansion on the margins of central business districts. Urban land zoned for industrial use is, on a square foot basis, worth less in the market than it would be if commercial or residential use were permitted there (DePasquale and Wheaton 1996), and industrial land, if it would be desirable for other purposes, is generally thought of as underutilized economically. Despite the opportunity cost associated with maintaining industry on central land, however, appeals to do so are heard from many quarters. Some advocates for protecting industrial land uses argue that manufacturing jobs offer a higher standard of living for low-skilled urbanites than do service jobs available at comparable skill levels (Ducharme 1991, Friedman 2003a, b). A second argument centers on the importance of backwardly linked manufacturing sectors to service sector prosperity (see Markusen and Gwiasda 1994, Rast 1999). Participants in the urban policy process who take these positions – principally industry groups, planners who define themselves as "equity planners," and community organizations concerned about local economic development and jobs – contend that shielding industry from the volatile dynamics of the real estate market is good planning practice either because it leads to a more acceptable distribution of wealth (in the case of the jobs argument) or because it produces an industrial mix that prevents vulnerability to overspecialization and contributes to a "balanced growth" strategy in the long term. Each of these arguments is discussed further below.

IV. Up-Zoning New York City's Mixed Use Waterfront Neighborhoods

New York City's shift from a blue-collar production center (albeit with many mercantile and producer services functions) to a post-industrial "global city" in the post-World War II period is well-documented (see Mollenkopf 1988, Fainstein and Fainstein 1989, Herod 1991, Sassen 1991, Freeman 2000). In the period from 1960 to 1989, manufacturing sector jobs in the five boroughs declined from almost a million to 369,000 (New York City Department of City Planning 1993a). Non-manufacturing industrial jobs also declined, though less markedly. High land costs have always kept space-intensive production operations from thriving in the city, and a combination of rising productivity, a switch to truck freight and competition from low-cost regions within the U.S. and overseas (together with the decline of the city's maritime industry, prompted by containerization)[2] eroded production employment after 1960. Waterfront areas, which had housed port-related industry, were particularly affected. The growth of financial and business services employment during the 1980s led the city out of the economic and fiscal crisis it had experienced in the 1970s, leading many to conclude that the city's future lay with further expansion in the service sectors (Mollenkopf 1983). Employment in services and finance, insurance and real estate (FIRE) sectors grew in both absolute and proportional terms (**Table 1**) during this period.

[TABLE 1 about here]

Despite a diminishing industrial sector, the amount of land zoned for industrial use in New York City decreased by only 5 percent between 1961 (the year of the most recent comprehensive revision of the Zoning Resolution) and the early 1990s.[3] Based on an extensive 1993 study of employment trends that included a close examination of 59 manufacturing-zoned areas, the City Planning Commission concluded that advanced services had eclipsed industry as New York City's growth driver. The Commission's assertion that the fate of the city's industrial base was now linked to the success of its service sectors turned on its head the traditional conception in regional economics of the relationship between goods and services production, but in doing so it echoed the work of urban scholars, notably Sassen (1991), whose research suggested that services had become an export sector for cities occupying command and control positions in a global system of production and distribution (see also Marshall and Wood 1992).[4]

The Citywide Industry Study thus argued that the city should use land use policy to spread to the outer boroughs the growth of the FIRE and other service sectors that had helped to bring the city back from bankruptcy during the 1980s. At the same time, it recommended that the city take action to maintain the remaining industrial base (New York City Department of City Planning 1993a). There was particular concern about keeping industries like printing and construction-supply to which growing service sectors were backwardly linked (New York City Department of City Planning 1993b, 12). Many businesspeople and members of the public expected city officials, even as they "up-zoned" vacant or underutilized industrial land in hopes of spurring service and consumption sector growth beyond the core business districts, to propose a comprehensive spatial strategy that would lead to the consolidation of the city's remaining industry.

However, a latent contradiction in the study's findings may have precluded this course of action. The Citywide Industry Study showed that the Queens and Brooklyn waterfronts and the areas immediately upland from them, which had long been eyed as sites for commercial and residential expansion, housed many of the largest concentrations of industrial jobs outside of Manhattan (**Table 2**).[5] In several of these neighborhoods, industrial activity had expanded in recent decades. As the study had concluded,

> Situation in, or proximity to, the Midtown CBD is the best predictor of industrial job location and density (jobs per acre) in the 59 study areas. Sixty-three percent of the total industrial-sector employment identified in manufacturing districts is located in study areas within a three-mile radius of Manhattan's Midtown CBD…Of all the possible factors, location in or proximity to the CBD appears to be the most important feature of industrial-sector business location in New York City. (New York City Department of City Planning 1993b, 33)

City planners now faced a conundrum. A property-led economic development strategy founded on services and tourism expansion came into spatial conflict with a strategy oriented toward sustaining and perhaps growing the industrial base. In the face of this contradiction, land use policy makers took little action after the 1993 study. No land use changes were formally proposed; the Queens and Brooklyn waterfronts were identified simply as “subject to land use change” at some time in the future (Department of City Planning 1993c, 54). Land use and real estate development politics on the Brooklyn and Queens waterfronts played out against this backdrop during the course of the 1990s.

[TABLE 2 about here]

Re-defining Mixed Use in Greenpoint & Williamsburg

The Greenpoint and Williamsburg neighborhoods are located at the northwest corner of Brooklyn, bordered on the west by the East River and on the north by Newtown Creek, a manmade waterway whose northern bank forms the southern boundary of Queens (**Figure 1**). Both were settled by farmers and became industrial and shipping centers in the mid-19th century (Department of City Planning 1993c, PICCED 2001). Industries based both at the waterfront and in the upland areas thrived during the heyday of maritime transport, attracting tens of thousands of workers who lived in tenements close to the factories on dense, low-scale residential blocks.

[Figure 1 about here]

While Greenpoint and Williamsburg lost port-related and industrial jobs after World War II with the decline of the maritime sector, they remained heavily industrial throughout the 1980s. The 1916 zoning resolution had designated Greenpoint and Williamsburg as “unrestricted use” areas because they contained industry,[6] and a mixture of residential and commercial land uses sustained there along with one-story industrial buildings and some factory lofts distinguished the neighborhoods from others in Brooklyn. Transportation links to Manhattan were also good, both because of the L subway line and the Williamsburg Bridge which crossed the East River directly into the Lower East Side. As a result, the two communities, particularly Williamsburg, became magnets in the late 1970s and 80s for artists and designers in search of space in an area with a strong sense of place. In 1976, the City Planning Commission enacted a Special District on the north side of Williamsburg which attempted to maintain the community's mixed use character by restricting industrial users from expanding their premises onto predominantly residential blocks and which likewise prohibited residential construction on blocks occupied primarily by industry (PICCED 2001).

The presence of artists in residence coincided with a shift in Greenpoint and Williamsburg's industrial base away from heavy industry and toward design and design-oriented manufacturing. Academic research undertaken in the early 1990s asserted that the new activity generated by design-build firms and artisans as well as by many long-standing tenants in the food, wood-working and printing industries represented a revival of industry: the blossoming of a species of flexible manufacturing that could compete in New York despite high factor costs (see Chapple 1994, Moss 1994). Williamsburg and Greenpoint, it was argued, had advantages – proximity to customers, a lively atmosphere, a Marshallian "in the air" quality – that that appealed to the specialty industrial firms and arts-related enterprises whose owners wanted or needed to be in New York. This conviction was underscored by comparative inactivity in "modern," low-density industrial parks in the Bronx and in eastern Brooklyn and Queens. Far from Manhattan's business districts and cut off spatially from residential communities and commercial zones, they were seen by some to be languishing because they had attempted to replicate suburban industrial parks (Lane 1997). The industry thriving in Greenpoint and Williamsburg required proximity to both commerce and population (Loomis 1993).

As the city's economy emerged from recession in the mid-1990s, however, land market conditions in these neighborhoods became less and less favorable for industrial uses. The confluence of the neighborhood's "hip" reputation with a growing population in the city, skyrocketing residential rents in Manhattan and new capital available to developers led to a spike in demand for land and buildings that could be developed as housing for upper-middle-class professionals. Although the development of residential units in industrial zones was technically prohibited under the zoning code, developers bid for and acquired industrial property at prices more applicable to residential property (some simply converted it illegally) with the assumption, often accurate, that they would be successful in obtaining variances – that is, exceptions to the zoning code. The Board of Standards and Appeals (BSA), a mayorally appointed body charged with deciding appeals from applicants who wish to dispose of property in ways that zoning and building codes proscribe, granted a total of more than 80 variances between 1995 and 2002 in the upland areas of Greenpoint and Williamsburg to applicants who wanted to build new housing on land zoned for manufacturing or to convert industrial buildings to loft apartments.

As a result, the displacement of low-cost land users that occurred in Greenpoint and Williamsburg during the mid-1990s can be described in terms of open, unrestricted competition between residential and industrial uses – both at the waterfront itself and especially in the upland areas east of the shoreline. The difference between loft buildings' current value as industrial parcels and their potential financial value as high-end residential and retail properties ensured that development companies and individual owners, given a climate of lax enforcement, would discourage otherwise viable industrial tenants from remaining.[7] According to business owners, community activists and others interviewed for this paper, numerous industrial firms were given month-to-month leases, informed that their rents would be rising to unsustainable levels, or simply evicted. When firms left voluntarily, property owners did not attempt to rent their spaces to other industrial tenants but simply kept them off the market in anticipation of selling to residential developers.[8] Firms that sought to acquire neighboring buildings or lots in hopes of expanding their operations were quoted exorbitant prices (Traster 2003).

Speculative activity and the ease of BSA conversions tipped the balance of industry and housing which had defined the neighborhood's character further toward housing as it introduced a higher-income population. Meanwhile, throughout the decade the city and state sited (or attempted to site) a series of sanitation and power generation facilities on the waterfront itself, drawing protest from residents who had formulated community plans calling for waterfront open space, expanded affordable housing and job-generating businesses there. Manufacturing zoning became deeply suspect in the neighborhood, since under its banner as a "catch-all" land use designation, officials repeatedly attempted to site undesired and often noxious facilities (see Rabin 1989). As one attendee at a neighborhood meeting put it, by the time waterfront and upland rezoning was proposed in 2003 "in people's minds, they can either have residential towers along the waterfront or they can have a power plant. Given that choice, they'll take the towers."

In the summer of 2003, the Department of City Planning made public its plans to re-zone western Greenpoint and Williamsburg (Barahmpour 2003, New York City Department of City Planning 2003). The re-zoning plan proposed that the largely derelict waterfront land formerly zoned for heavy manufacturing uses become high-rise, predominantly market-rate residential.[9] In upland areas formerly zoned as industrial or mixed use, it proposed a switch either to medium-scale residential use or to a modified mixed use zone termed MX. In public presentations, planners stressed that eastern portions of Greenpoint-Williamsburg would continue to be zoned for manufacturing, and pointed to industrial decline, especially over the previous decade, as a rationale for re-zoning the western portions. Nevertheless, a survey by a local advocacy group documented 90 manufacturing businesses in the rezoning area, 17 percent of them with 100 employees or more (**Figure 2**). Non-manufacturing industrial jobs also number in the thousands.[10] At a meeting sponsored by the community planning board and in the local press, several businesses testified that although they were attempting to expand their operations by renting space in adjacent buildings, the speculative climate (in which property owners proceeded with plans to convert their buildings) had undermined their efforts to undertake new rounds of investment.[11]

[Figure 2 about here]

Because maintaining the neighborhood's mixed use character is a stated goal for the City in Greenpoint-Williamsburg, the modified mixed used zoning designation (MX) proposed for several upland areas merits attention here. Unlike the special mixed use district mapped at the community's request in 1976, MX allows for unrestricted as-of-right residential conversions. With the potential value of land officially increased (and the ability to realize returns on it formalized) on more than 100 city blocks as a result of the re-zoning, it is unlikely that industrial properties would survive as such, since their occupants would be unable to afford the rents that the properties could command if put to residential or retail uses. The MX zone, then, is more accurately seen as a transitional area out of which industrial users are gradually being priced. If the re-zoning were to be approved as proposed in the current policy context, future mixed use in these areas would likely be limited to housing, retail and offices. Further, evidence cited at a City Council hearing by the manager of the East Williamsburg Industrial Park suggests that artists and artisans who have been driven by high rents from the core mixed use areas of Greenpoint-Williamsburg are settling in illegal loft dwellings at the predominantly industrial periphery, touching off a new round of conversion activity that is jeopardizing industrial land tenure in the parts of the neighborhood that the city does not intend to officially re-map. According to the manager, over 500,000 square feet of space within the boundaries of the industrial park has been illegally converted to housing and rented to residential tenants, despite repeated appeals to regulatory officials at the city's Department of Buildings (Leon 2003).

An Alternative CBD in Long Island City

If the backdrop for real estate market changes in Greenpoint and Williamsburg is the clamor for loft housing in what is perceived as the city's hippest neighborhood, the corresponding backdrop in Long Island City in western Queens is a drive on the part of City officials to create new office nodes in the outer boroughs. At the height of the commercial property boom in the late 1980s, economic development agencies' concern that inflated commercial rents were driving New York-based companies to locate "back office" operations in New Jersey and Connecticut prompted the city to subsidize the development of Metrotech, a commercial core in downtown Brooklyn where rents rivaled those of intra-regional competitors (Fainstein 2001, 148-9). In the same period, Citicorp (now Citigroup), one of the city's largest commercial banks, availed itself of zoning changes and financial incentives from the city to develop a 48-story, 1.25 million square foot office tower in a small-scale office district, located a half mile inland from the waterfront, abutting the densest industrial neighborhood in Queens, Long Island City (**Figure 3**). In 1993, a few months after the Citywide Industry Study was released the Department of City Planning outlined a plan to facilitate a new central business district there (Department of City Planning 1993d). But when economic recession, combined with a surplus of space that had resulted from speculative overbuilding during the 1980s, made lower-rent space available in Manhattan in the early 1990s efforts to stimulate the development of additional Class-A office buildings in western Queens died down and the Citicorp Tower remained incongruous amidst the loft factories and one-story industrial buildings on the Queens side of the East River.

[Figure 3 about here]

Enthusiasm for a CBD in Long Island City, which like Downtown Brooklyn had excellent transportation connections to Manhattan, revived in the late 1990s as the city's economy emerged from recession and office vacancy rates declined. In 2001, the Department of City Planning announced its intention, in the words of a *New York Times* headline, to "make the Citicorp tower less lonesome" by re-zoning 37 blocks in central

Long Island City around the transit hubs at Queens Plaza and Court Square to accommodate five million new square feet of new high-density office development as well as three hundred residential units and new retail establishments (Kinetz 2001, New York City Department of City Planning 2001, Wax 2001). This proposal, which involved the mapping of three separate sub-districts, was vetted through the City's Uniform Land Use Review Procedure (ULURP)[12] and officially adopted in July of 2001.

Like Greenpoint-Williamsburg, Long Island City is one of the original thriving industrial concentrations identified in the 1993 Citywide Industry Study, and like Greenpoint-Williamsburg it is a mixed use, live-work area whose essential character developed prior to the separation of uses mandated by the 1961 zoning code revision. Its late-90s growth, however, was attributable not to an artisan revival but primarily to companies that had been priced out of Manhattan lofts in the scramble to retrofit them for high-rent new media tenants. These firms, particularly printing companies, apparel companies and firms focused on providing maintenance and infrastructure services to Manhattan office buildings, relocated to Long Island City where they occupied loft space similar to that they had left in Manhattan while remaining close to their customers (Holusha 2000). Thus, the rezoning raised outcry, particularly from companies that had only recently moved (Ives 2000). According to a manufacturer of embroidered fabrics for interior design applications in testimony to the City Planning Commission:

> We had the misfortune of having our [Manhattan] lease expire just at the height of the dot com madness and were forced to relocate with just a few months notice…We selected Long Island City and what we deemed a manufacturing ha-

> ven as our new home…We have barely survived the forced move…Should we start packing now? Are we going to be forced to move again? (E. Smith 2001).

City officials argued that the rezoning would draw dense commercial development to a core central area of the neighborhood, thus removing pressure from the peripheral areas that were to remain zoned for industry. Advocates responded that without more affirmative protection for industry – and without public investment in industrial infrastructure in the neighborhood that matched the vigor of the City's investment in amenities for commercial tenants – a climate of instability would preside:

> The owner of a loft building a few blocks outside the core will see the office tenants coming, and he will convert his space in the hope of luring a tenant who will pay two, three or four times his current rent (Crean 2001).

The call for clear delineation of the areas in which new commercial construction and especially conversions would be permitted (via both the zoning code and the appeals process) echoed the findings of a 1990 study conducted by planning firm Abeles Phillips Preiss and Shapiro for the Public Development Corporation, New York's quasi-public economic development arm. This study highlighted the area's "enduring power as an industrial district" (1990b,1) and urged that officials undertake comprehensive planning for the neighborhood and "carefully construct development area boundaries" for commercial construction (1990a, 5) in order to avoid fueling property speculation based on the prospect of the entire area's transition to predominantly office-based district. As the study succinctly put it, definitive boundary-setting by land use planners was required to reverse a situation in which "property owners and investors have bid up the purchase price of parcels based not on the income that can be derived from their present use, but rather on the value inherent in their future redevelopment" (1990b, 20).

As the 2001 rezoning made its way through the approval process, however, any official aspirations to ensure Long Island City's industrial future as the city promoted an office development strategy nearby receded. Top staff at the Economic Development Corporation, the successor to the agency that had commissioned the Abeles study, had responded to pressure from manufacturer groups and labor unions and put plans in place to support existing industries through infrastructure investment, relocation assistance and other measures. These interventions were to have accompanied the land use changes, but were abandoned in the aftermath of the September 11th crisis though the zoning amendments remained in place. Moreover, weeks before the final approval of the 37-block rezoning, the Group of 35, a blue-ribbon panel appointed by Senator Charles Schumer at the height of the 1990s boom to examine the City's economic development needs, released an influential report that cast the disposition of Long Island City into further confusion. The Group of 35, whose findings have been endorsed by the present mayoral administration, called for the development of 15 million square feet of office space in the area – 10 million more than provided for by the 2001 rezoning (Bagli 2001). As of mid-2003, the Department of City Planning was engaged in a study expected to result in a proposal to authorize as-of-right residential development[13] and to aggressively promote office development further west and north into the traditionally mixed use area, a move which many believe will have a homogenizing effect as industrial uses, with their lower capacity to yield returns, are gradually phased out. According to interviewees in Long Island City, industrial space in the neighborhood is now expensive and difficult to obtain, as many owners keep their properties off the market or insist on high rents in anticipation of commercial tenants.

V. The Anatomy of a Planning Dilemma

The cases discussed here suggest that at the start of the 1990s, New York City's mixed use waterfront neighborhoods, though less industrial than in earlier decades, continued to contain significant concentrations of manufacturing as well as non-manufacturing industrial activity. Moreover, their economic profiles suggested potential for new industry going forward, particularly industrial activities related to interior design, media, the fine arts and theater. In these neighborhoods, agglomeration economies and geographic and supply-chain linkages to the city's most propulsive economic sectors had helped some types of industry to thrive. During the 1990s, however, appreciating land values and speculation, in the context of inaction on the part of the city's enforcement agencies, negatively affected incumbent industrial users incapable of bidding premium rents, either forcing them out of business or causing them to move out of the city. Evidence of declining industrial employment in these Greenpoint-Williamsburg and Long Island City during the 1990s then provided underlying justification for the re-zonings now under consideration.

Debating the Planner's Role

In this context, stakeholders in the city – including elected officials, industry groups, and community-based organizations – have conducted parallel debates that encompass larger questions about land use and economic development in the contemporary urban economy. In interviews for this article as well as in the media and in public forums, advocates for industrial retention have maintained that after the release of the Citywide Industry Study, city planners failed to create a "level playing field" on which the city's remaining manufacturing and other industrial land users could compete (see Friedman 2003a, b, Brooklyn Coalition for Equitable Development 2003, Council of the City of New York 2003). According to them, because industry is an important source of employment and economic diversity, city planners should have insisted upon more active code enforcement, planned comprehensively to distinguish areas slated for continued industrial use from areas designated for commercial and residential redevelopment, and clearly signaled these designations to businesses and developers.[14] This would, they argue, have created a climate of certainty for industrial tenants in areas slated to continue as industrial zones and alerted others well in advance that their areas would be re-designated. Under these circumstances, an appropriate amount of manufacturing land could have been re-zoned with less disruption, less displacement, and less land speculation than has actually occurred. Planners were responsible, in this view, to defend the interests of incumbent land users and contain the impulses of market actors who, by opportunistically contravening standing land use regulation, stood to realize windfalls when mixed use neighborhoods began to transform.

City planning officials minimize the connection between property-led development and industrial decline, instead emphasizing the globalization of production and the demise of the city's port facilities. In both interviews and public meetings, they have argued that no amount of enforcement or signaling could have overcome the inexorable departure of industry from western Brooklyn and Queens and throughout the city in the 1990s. Cost and transportation factors luring firms to the metropolitan periphery or overseas were simply too strong, as they have been in nearly all central cities (see Skinner and

Braconi 1994). Thus, it is asserted, city planners and the elected officials who guide their work have acted appropriately, if passively, in incrementally adapting land use and zoning policies to an economy in which manufacturing is no longer strategically significant. Planners have followed the market, as is appropriate in a context where markets are working effectively and producing desirable outcomes (see Bartik 1990).

Debating the future of a global city's economy

This retrospective debate about the responsibilities of planning is interwoven with a prospective debate founded in contrasting conceptions of an optimal direction for New York City's predominantly post-industrial economy. According to many, city officials have been strategic in courting, subsidizing and/or tolerating new office and residential development near central business districts, since these represent the best hope for consolidating and advancing New York's position as a global city. The up-zonings now being proposed are seen to confer belated legal legitimacy on a process by which New York City's industrial past is giving way fully to a future based on advanced services, spectacle and entertainment. The East River waterfront, in its redeveloped form, is portrayed as a prospective site of renewed civic life, leisure opportunities and consumption-based economic prosperity, and the image of derelict piers transformed into riverfront recreation centers is essential to the marketing campaign surrounding New York City's bid for the 2012 Olympic Games (see NYC 2012 2002, Kilgannon 2003). Because a wholesale transition is inevitable, in this view, planning practice is overdue in recognizing and supporting it.

The opposing view holds that it is in the public interest for the production of high-value-added goods linked to essential sectors like design, restaurants and the arts to remain an element of the city's economic base. Advocates of this position emphasize that while New York City was secure in its finance and producer services specializations prior to the early 1990s recession, the recovery during the post-recession boom period did not bring employment levels in these sectors even to their levels of the late 1980s, and the Manhattan FIRE concentration is clearly weakening in comparison to its regional counterparts (Bowles and Kotkin 2003).[15] Critics of the property-driven approach suggest that industrial activities cannot be stripped from the economic base without leaving the city dangerously vulnerable to fluctuations in the finance and producer services industries (see Scott 2003). They assert that industry offers a better hope than services of providing middle-class jobs to the marginally educated and non-English-speaking, [16] and that its presence in mixed use neighborhoods relieves gentrification pressures and preserves affordable working-class living environments. Finally, they argue, polyglot, multi-use communities like Williamsburg incubate and support the much sought-after "creative economy" which officials publicly exalt. Paradoxically, property-led development, under which the escalating value of land ensures that low-rent uses cannot survive, represents a potential threat to creative enclaves (see Bowe 2003).

Despite the vigor of this debate about the future, the tenets of property-led economic development remain virtually unassailable in New York City's planning establishment. Redevelopment plans for the west side of Manhattan and the South Bronx, as well as Long Island City, Greenpoint and Williamsburg, assume the gradual replacement of industrial buildings and infrastructure with high-end residential and commercial construction, or with adaptive re-use that recycles industrial lofts as living, commercial and recreational spaces. The rhetorical struggle between advocates of the new opportunistic development patterns and those who would restrain development in the interest of promoting urban industry is easily caricatured in the business press as a contest between proponents of positive change and a group of naifs operating with nostalgic or sentimental motives (see David 2003). At a spring 2003 panel discussion held by a local policy institute on housing and industry in waterfront areas, a city planning official responded to a question by implying that the questioner sought a return the village life of several generations ago in which all goods were produced locally.[17]

VI. Conclusion

To the extent that city planning is a rhetorical project – "persuasive story-telling about the future" (Throgmorton 1992) – the actors on either side of the current debates over rezoning in Long Island City and Greenpoint-Williamsburg present contrasting visions of the future of New York City's economy. In one vision, industrial land uses (along with other low-end activities in prized areas) yield to the creative destruction of the land market, producing both economic value for property entrepreneurs and higher revenues for the city. In the other vision, industry, while having shrunk and shifted over time toward design-oriented and specialty manufacturing and toward industrial services that support office-based activities, remains a source of economic stability while also mitigating gentrification pressures in working-class neighborhoods. There is little doubt that the current property-led economic development strategy facilitates a wholesale transition to the post-industrial scenario far more quickly and thoroughly than will an approach which sees a role for city planning in containing and moderating the market. The issue at hand is whether or not the planning community's sponsorship of this transition is a reason for pride or for consternation. The cases of Greenpoint-Williamsburg and Long Island City in New York City suggest that at the least, city planners and others charged with regulating land use should consider how their actions (or rather, their passivity) may have worked to accelerate a trend that has negative repercussions for business owners and their employees.

The question of when and how to constrain the land market to promote diversity among high- and low-rent uses has long been relevant for cities like New York and London, and it is increasingly presenting itself in countries that are in the process of shedding strong traditions of central planning (see Tasan-Kok 2003). The cases described in this article suggest that the dilemma planners face when logical sites for commercial and residential expansion also serve as niches for lower-yielding uses is a problem that a reactive, incremental style of planning cannot adequately resolve. A more comprehensive planning approach, one that considered the economic trajectory of all of a city's neighborhoods at the same time, would allow larger debates – debates about urban economies and the public sector's role in shaping them – to bubble to the surface. Rather than treating them as individual applications or rejections of the "highest and best use" principle, planners should view re-zoning and redevelopment actions in the context of their impact on the economy of a city or region as well as in terms of their effects on a variety of residents. This approach would not resolve the fundamental disagreement between those who embrace property-led development and those who condemn it, but it would create opportunities to explicitly engage with the social consequences of the property-led approach and to address strategic questions that in the current process remain on the sidelines.

[1] While this debate is often portrayed as a conflict between market-led and state-led development, Healey (1990, 10) points out that spatial reorganization involves substantial state intervention. The more relevant question, then, is whether the outcomes of government's necessary involvement in the land market redound to good or to ill.

[2] Containerization was developed at the Port of Newark in the 1950s and first applied to international shipping in the 1960s. Because New York City did not have the acreage required for container operations, and because it did not have a freight rail link to areas west of the Hudson River, major shipping lines began moving their operations to the Ports of Newark and Elizabeth in New Jersey in the late 1960s (see Doig 2001).

[3] Many have argued that the City Planning department's characterization of the city's unused manufacturing zoned (M-zoned) land is misleading given that much of this is taken up by transportation and sanitation facilities operated by the city or its public utilities (see Gratz and Mintz 1998). The largest single occupant of M-zoned land, for example, is Kennedy Airport in Queens. This characterization of the situation, however, has had a powerful effect on public perception.

[4] The predominance of producer services as regional exports becomes slightly less pronounced if the entire New York Metropolitan Area is examined. Manufacturing accounted for 7 percent of private non-farm employment in New York City in 1999, but for 11 percent of employment in the New York/Northern New Jersey/Long Island MSA.

[5] As Table 2 shows, the densest concentrations of industrial employment occurred in loft building areas in Manhattan's garment and printing districts.

[6] The 1916 zoning resolution established a hierarchy of uses, with residential-only neighborhoods as the most restrictive. While residential neighborhoods restricted all other uses and commercially zoned neighborhoods did not allow manufacturing, manufacturing zoning represented a "catch-all" category which accommodated anything not permitted in other kinds of districts.

[7] See Zukin 1982 for an illustration of this phenomenon as it occurred in Manhattan's SOHO district.

[8] A majority of industrial firms in New York City lease their space (Abeles, Phillips and Shapiro 1990a, PICCED 2001), a higher percentage than in other cities. Industrial companies which own their space are less subject to direct real estate pressure but have the incentive to "cash out" and sell their buildings when the properties become more valuable as real estate commodities than as production operations (NYIRN 2003).

[9] The re-zoning proposal reversed a policy trend of locating noxious city facilities along the riverfront, pleasing environmental justice advocates, but housing groups were disappointed by the lack of stronger incentives for affordable housing.

[10] Estimates of industrial decline in the western portion of Greenpoint-Williamsburg during the 1990s vary, and are difficult to compare because of differing study area boundaries. Using State Department of Labor data, the Department of City Planning estimates a total decline in industrial jobs of 22% with a 50% decline

in manufacturing jobs from 1991 to 2000 (New York City Department of City Planning 2003). A 2001 study by the Pratt Institute Center for Community and Environmental Development which relied on information from a business listings database and researched only manufacturing firms during the same time period, estimates a smaller decline in manufacturing than the city (PICCED 2001).

[11] Though arts-related development is not the main focus of this paper, a 2002 report by a local policy research group suggested that artists and arts-related enterprises were also being displaced from Williamsburg and Greenpoint by rising rents (Kleiman 2002).

[12] Under ULURP, a change in the zoning resolution must be brought before the Community District Board in the affected neighborhood for an advisory vote before being subject to the official sanction of the Borough President of the affected Borough, the City Planning Commission, and finally the City Council.

[13] Another factor at play in this situation is the City's plan to locate housing for athletes on the Queens waterfront as part of its bid to host the 2012 Olympic Games.

[14] Interviewees also contended that the city's tax abatement and assistance programs for commercial firms and developers are far more generous than those offered to the principals of industrial companies or the developers of industrial land.

[15]The Class A office vacancy rate in the Manhattan business districts remained at 8% in late 2003, even with signs of recovery in the rest of the city's economy. In cases in which city agencies or by not-for-profit organizations have actively encouraged industrial development in New York City, such as the Brooklyn Navy Yard, the Greenpoint Manufacturing and Design Center, and the Brooklyn Army Terminal, vacancy rates are between 2 and 5 percent. According to some, this suggests that public sector attention to industrial development at the same level currently accorded to commercial and residential projects could aid the emergence of competitive industrial complexes in the city.

[16] Evidence from the 2002 Housing Vacancy Survey, which provides information on occupational employment and wages for the city's employed population in 2001, suggests that industrial employees, particularly those without college degrees, do not earn more than their counterparts in the service industries. Thus, the more compelling argument for rationalizing and enforcing industrial zoning, in the New York case at least, is the argument centered on economic diversity.

[17] Industrial retention proponents have to some extent created this dilemma with the argument that it is possible to revive the city's port-oriented and heavy industrial economy, and with the notion that consumption and services-oriented economic development are in some way fictive (see Fitch 1993). As Fainstein has noted, critical urban theory often rests on the "unformulated premise" that only goods production has a genuine claim on the definition of authentic urban activity, whereas the contemporary city is increasingly organized around the flow of information and services (2001, 209).

References

Abeles, Peter L. 1989. Planning and Zoning. In C.M. Haar and J.S. Kayden eds., *Zoning and the American Dream: Promises Still to Keep*. Chicago: American Planning Association. 122-153.

Bartik, Timothy. 1990. The Market Failure Approach to Regional Economic Development Policy. *Economic Development Quarterly* 4 (4): 361-370.

Beauregard, Robert. 1993. *Voices of Decline: The Postwar Fate of US Cities*. Oxford: Blackwell.

Castells, Manuel. 1996. *The Rise of the Network Society*. Malden, MA: Blackwell.

Clavel, Pierre. 1986. *The progressive city: planning and participation 1969-1984*. New Brunswick, NJ: Rutgers University Press.

Clavel, Pierre and Norman Krumholz, eds. 1994. *Reinventing Cities: Equity Planners Tell Their Stories.* Philadelphia: Temple University Press.

DiPasquale, Denise and William C. Wheaton. 1996. *Urban Economics and Real Estate Markets*. Englewood Cliffs, NJ: Prentice Hall.

Doig, Jameson. 2001. *Empire on the Hudson: Entrepreneurial Vision and Political Power at the Port of New York Authority.* New York: Columbia University Press.

Ducharme, Donna. 1991. Planned Manufacturing Districts: How a Community-Led Initiative Became City Policy. In P. Clavel and W. Wiewel eds., *Harold Washington and the Neighborhoods: Progressive City Government in Chicago 1983-1987*. New Brunswick, NJ: Rutgers University Press. 221-237.

Fainstein, Susan S. 1991. Promoting Economic Development: Urban planning in the United States and the United Kingdom. *Journal of the American Planning Association* 57 (Winter): 22-33.

_________. 2001. *The City Builders: Property Development in New York and London 1980-2000*. Second Edition, Revised. Lawrence, KS: University Press of Kansas. 2nd Edition.

Fainstein, Susan S. and and Norman I. Fainstein. 1989. The Manhattan Business District 1945-1988, In G.D. Squires ed., *Unequal Partnerships*. New Brunswick: Rutgers University Press. 59-75.

Feagin, Joe and Robert Parker. 1990. *Rebuilding American Cities: The Urban Real Estate Game*. 2nd ed. Engelewood Cliffs, NJ: Prentice Hall.

Fischler, Raphael. 2000. Linking planning theory and history: the case of development control. *Journal of Planning Education and Research* 19 (3): 233-241.

Fitch, Robert. 1993. *The Assassination of New York*. London and New York: Verso.

Fogelson, Robert. 2003. *Downtown: Its Rise and Fall 1880-1950*. New Haven: Yale University Press.

Freeman, Joshua B. 2000. *Working Class New York: Life and Labor Since World War II*. New York: The New Press.

Frieden, Bernard and Lynne Sagalyn. 1991. *Downtown, Inc.: How America Rebuilds Cities.* Cambridge, MA: MIT Press.

Garvin, Alexander. 2002. *The American City: What Works, What Doesn't*. 2nd Edition. New York: McGraw Hill.

Gratz, Roberta and Norman Mintz. 1998. *Cities Back From the Edge: New Life for Downtown*. John Wiley and Sons.

Hall, Peter. 1988. *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the 20th Century*. London: Blackwell.

Healey, Patsy. Understanding land and property development processes: Some key issues. In P. Healey and R. Nabarro eds. *Land and Property Development in a Changing Context*. Aldershot, Hants, UK: Gower.

Heilbrun, James. 1974. *Urban Economics and Public Policy*. New York: St. Martin's Press.

Herod, Andrew.1991. From rag trade to real estate in New York's Garment Center: Remaking the labor landscape in a global city. *Urban Geography* 12 (4): 324-338.

Kaiser, Edward John and Richard Godschalk. 2000. Development planning. In C. Hoch and L. Dalton eds., *The Practice of State and Local Government Planning*. Washington, DC: International City and County Management Association. 141-169.

Lane, Robert. 1997. The Machine Next Door. *Places* 10 (1): 10-23.

Logan, John and Harvey Molotch. 1987. *Urban Fortunes: The Political Economy of Place.* University of Calif. Press.

Loomis, John. 1992. *Manufacturing Communities: Primer for an Enterprise Zone*. Unpublished manuscript with drawings.

Markusen, Ann and Vicky Gwiasda. 1994. Multipolarity and the Layering of Functions in World Cities: New York City's Struggle to Stay on Top. *International Journal of Urban and Regional Research*. 18 (2): 167-193.

Marshall, J.N. and P.A. Wood. 1992. "The role of services in urban and regional development: recent debates and new developments." *Environment and Planning* A. 24: 1255-1270.

Meck, Stuart, Paul Wack and Michelle J. Zimet. 2000. Zoning and subdivision regulations. In C. Hoch and L. Dalton eds., *The Practice of State and Local Government Planning*. Washington, DC: International City and County Management Association. 343-374.

Mele, Christopher. 2000. *Selling the Lower East Side: Culture, Real Estate and Resistance in New York City*. Minneapolis, MN: University of Minnesota Press.

Mollenkopf, John H. 1983. *The Contested City*. Princeton, NJ: Princeton University Press.

________________.1989. The Post-Industrial Transformation of New York City's Economy. In J. Mollenkopf ed. *Power, Culture and Place: Essays on New York City.* Thousand Oaks, CA: Sage Publications. 223-258.

Molotch, Harvey. 1976. The City as a Growth Machine. *The American Journal of Sociology* 82:309-32.

__________1999. Growth Machine Links: Up, Down and Across. In A. Jonas and D. Wilson eds., *The Urban Growth Machine: Critical Perspectives Two Decades Later.* Albany, NY: State University of New York Press. 247-265.

Rabin, Yael. 1989. Expulsive Zoning: The Inequitable Legacy of *Euclid*. In C.M. Haar and J.S. Kayden eds. *Zoning and the American Dream: Promises Still to Keep*. Chicago, IL: Planners Press. 101-121.

Rast, Joel. 1999. *Remaking Chicago: The Political Origins of Urban Industrial Change*. Dekalb, IL: Northern Illinois University Press.

Sagalyn, Lynne B. 2001. *Times Square Roulette: Remaking the City Icon*. Cambridge, MA: MIT Press.

Sassen, Saskia. 1991. *The Global City: New York, London ,Tokyo*. Princeton, NJ: Princeton University Press.

Smith, Neil. 1986. "Gentrification, the Frontier and the Restructuring of Urban Space," in N. Smith and P. Williams eds., *Gentrification of the City*. Boston: Allen and Unwin. 15-34.

_______ 2002. New Globalism, New Urbanism: Gentrification as Global Urban Strategy. In N. Brenner and N. Theodore eds., *Spaces of Neoliberalism: Urban Restructuring in North America and Western Europe.* Malden, MA: Blackwell Publishing. 80-103.

Squires, Gregory. 1991. Partnership and the Pursuit of the Private City. In M. Gottdiener and C. Pickvance eds., *Urban Life in Transition*. Newbury Park: Sage, 123-140.

Swanstrom, Todd. 1987. The Limits of Strategic Planning for Cities. *Journal of Urban Affairs* 9(2): 139-157.

Tasan-Kok, Tuna. 2003. Relaxed regulation of spatial development and spatial fragmentation in Budapest, Istanbul and Warsaw. Unpublished Manuscript, University of Utrecht.

Throgmorton, James A. Planning as persuasive storytelling about the future: negotiating an electric power rate settlement in Illinois. *Journal of Planning Education and Research*. 12(1):17-31.

Turok, I. 1992. "Property-led urban regeneration: Panacea or placebo?" *Environment and Planning A* 24: 361-379.

Weber, Rachel. 2002. Extracting Value from the City: Neoliberalism and Urban Redevelopment. In N. Brenner and N. Theodore eds., *Spaces of Neoliberalism: Urban Restructuring in North America and Western Europe.* Malden, MA: Blackwell Publishing. 172-193.

Zukin, Sharon. 1982. *Loft Living*. Baltimore: Johns Hopkins.

Planning documents and research

Abeles Phillips Preiss and Shapiro, Inc 1990a. *Long Island City Industry Study: Executive Summary*. Submitted to New York City Public Development Corporation. November.

__________________ 1990b. *A Strategic Plan for Long Island City Industry*. Submitted to New York City Public Development Corporation. November.

Bowe, Marisa. 2003. Testimony to the New York City Planning Department on the proposed Greenpoint-Williamsburg Re-Zoning. November 13. Representing Neighbors Against Garbage.

Bowles, Jonathan and Joel Kotkin. 2003. *Engine Failure*. New York: Center for an Urban Future, September.

Bram, Jason. 2003. New York City's Economy Before and After September 11th. In *Federal Reserve Bank of New York, Current Issues in Economics and Finance: Second District Highlights*. 9:2 February.

Brooklyn Coalition for Equitable Development. 2003. Concept Paper.

Brooklyn Community Board 1. 1998. "*A Matter of Balance: Housing, Industry, Open Space" Williamsburg Waterfront 197a Plan*. Accessed June 1 2003 at http://www.billburg.com/197a/index.html.

Brooklyn Community Board 1. 1999. *Greenpoint 197a Plan*. Accessed June 1, 2003 at http://www.picced.org/NewDesign/greenpt.htm.

Chapple, Karen. *Manufacturing in New York City: A New Mixed use Paradigm.* Masters Thesis, Pratt Institute Graduate Center for Planning and the Environment, Pratt Institute. July.

Council of the City of New York. 2003. *Briefing paper: New manufacturing in New York City; Policies to retain, promote and attract manufacturing and industry*. November 18.

Crean, Sarah. 2001. Testimony to the New York City Planning Commission on Long Island City Rezoning. June 20. Representing the New York Industrial Retention Network.

Hornick, Sandy. 2003. Remarks at forum, "Re-Zoning NYC's Industrial Waterfronts: Job Displacement or an Opportunity to Solve the Housing Crisis?" New School for Social Research. Sponsored by the Center for an Urban Future and the J.M. Kaplan Center for New York City Affairs. March 18th. Representing the New York City Department of City Planning.

Kleiman, Neil Scott. 2002. *The Creative Engine.* New York: Center for an Urban Future, November.

Leon, Jose. 2003. Testimony to the Council of the City of New York, Committee on Economic Development, Select Committee on Waterfronts. Oversight hearing: new manufacturing in New York City; Policies to retain, promote and attract manufacturing and industry. Representing the East Williamsburg Industrial Development Corporation. November 18, 2003.

Friedman, Adam. 2003a. Testimony to the Council of the City of New York, Committee on Economic Development, Select Committee on Waterfronts. Oversight hearing: new manufacturing in New York City; Policies to retain, promote and attract manufacturing and industry. Representing the New York Industrial Retention Network. November 18, 2003.

Group of 35 (U.S. Senator Charles E. Schumer and Hon. Robert E. Rubin, co-chairs). 2001. *Preparing for the Future: A Commercial Development Strategy for New York City*. Accessed June 2003 at http://urban.nyu.edu/g35/Group-35.pdf.

Levy, John. 2003. Testimony to the Council of the City of New York, Committee on Economic Development, Select Committee on Waterfronts. Oversight hearing: new manufacturing in New York City; Policies to retain, promote and attract manufacturing and industry. Representing John's Gourmet. November 18, 2003.

Moss, Mitchell L.1994. *Made in New York: The Future of Manufacturing in the City of New York*. New York: Urban Research Center, Robert F. Wagner Graduate School of Public Service, New York University. August.

NYC 2012. 2002. *The Plan for A New York Olympic Games*. New York: NYC 2012.

New York City Department of City Planning. 1993a. *Citywide Industry Study Zoning Technical Report*. January.

________________________. 1993b. *New Opportunities for a Changing Economy: Summary Report of the Citywide Industry Study*. January.

________________________. 1993c.*Citywide Industry Study Geographic Atlas of Industrial Areas*. January.

________________________. 1993d. *Plan for Long Island City: A Framework for Development*. August.

________________________. 2001. Proposed Zoning Text Amendments, Long Island City, Queens.

________________________. 2003.*Greenpoint Williamsburg Land Use and Waterfront Plan (Summary)* June.

New York Industrial Retention Network (NYIRN). 1999. *The Little Manufacturer That Could: Opportunities and Challenges for Manufacturing in New York*. May.

Pratt Institute Center for Community and Environmental Development (PICCED). 2001. *Making It In New York: Manufacturing Land Use and Zoning Initiative.* Pratt Institute: Brooklyn, NY. June.

Skinner, Curtis and Frank Braconi. 1994. *Manufacturing Decline and the Land Use Debate*. New York: Citizens Housing and Planning Council. December.

Smith, Ernie. 2001. Testimony to the New York City Planning Commission on Long Island City Rezoning. June 20. Representing Penn & Fletcher Inc. and the Manufacturers Association of New York City.

_______ 2003. Testimony to the Council of the City of New York, Committee on Economic Development, Select Committee on Waterfronts. Oversight hearing: new manufacturing in New York City; Policies to retain, promote and attract manufacturing and industry. November 18, 2003.

News articles and Op-Eds:

Bagli, Charles V. 2001. Schumer Proposals Address Shortage of Office Space. *The New York Times.* June 11. B3.

Barahmpour, Tara. 2003. City Seeking to Rezone Brooklyn Waterfront. *New York Times.* June 19. B3.

David, Greg. 2003. Employ new ideas to save jobs. *Crain's New York Business* September 8. Page 3.

Friedman, Adam. 2001. Rezone Long Island City to Save Jobs (Op-Ed). *New York Newsday*. January 5. A43.

______________. 2003b. Zoning to Protect Manufacturing. *Gotham Gazette.* April. (http://www.gothamgazette.com/article/landuse/20030422/12/358)

Holusha, John. 2000. Crossing the Queensboro Bridge as a Resettler. *New York Times.* August 13. 11(9).

Ives, Nat. 2000. Zone Defense: Manufacturers are Demanding an Eye for an Eye, a Factory for an Office Building. *City Limits Magazine* 26(6): 6.

Kilgannon, Corey. 2003. Going Near the Water; Renovation Efforts Reclaim the City's Forbidden Shoreline. *New York Times.* August 18. B1.

Kinetz, Erika. Making the Citicorp Tower Less Lonesome. *New York Times* April 29. 14(7).

Long Island City Business Development Corporation. 2001. LIC Rezoning Underway. In *LICBDC Conduit Update* April 11.

Scott, Janny. 2003. Enjoy That Danish: It's Lifting the City's Employment Rate. *New York Times.* July 31. B1.

Traster, Tina. 2003. Hot Brooklyn Properties Put a Freeze on Industry. *Crains New York Business*. May 12.

Wax, Alan. 2001. The Next Big Thing: Long Island City bustles with activity as developers plan glittering new office space. *NewYork Newsday.* November 11. C18.

Meetings attended:

March 18, 2003. Forum, “Re-Zoning NYC’s Industrial Waterfronts: Job Displacement or an Opportunity to Solve the Housing Crisis?” New School for Social Research. Sponsored by the Center for an Urban Future and the J.M. Kaplan Center for New York City Affairs.

May 21, 2003. Brooklyn Community Board 1 Economic Development Committee. Information session for Greenpoint-Williamsburg businesses on upcoming rezoning action.

June 24, 2003. Brooklyn Community Board 1 meeting for the presentation of the Department of City Planning’s proposal to re-zone Greenpoint and Williamsburg. Polish and Slavic Center, Greenpoint, Brooklyn.

July 1, 2003. Meeting on implementation of Greenpoint and Williamburg Waterfront 197a Plans. Teddy’s Bar. Sponsored by Neighbors Against Garbage.

November 18, 2003. Council of the City of New York, Committee on Economic Development, Select Committee on Waterfronts. Oversight hearing: new manufacturing in New York City; Policies to retain, promote and attract manufacturing and industry.

Table 1: Employment by sector in New York City, 1969-99

	1969		*1979*		*1989*		*1999*	
	Number (in thousands of jobs)	% of all wage and salary employment*	Number (in thousands of jobs)	% of all wage and salary employment*	Number (in thousands of jobs)	% of all wage and salary employment*	Number (in thousands of jobs)	% of all wage and salary employment*
Services	1,041	26	1,121	32	1,493	39	1,818	45
Manufacturing	839	21	538	15	369	10	262	7
FIRE	563	14	517	15	648	17	602	15
Retail Trade	520	13	426	12	439	11	470	12
Transportation and public utilities	34	9	282	8	237	6	252	6
Wholesale Trade	334	8	279	8	240	6	205	5
Construction	121	3	85	2	142	4	145	4

*Does not sum to 100 because agriculture, mining, and government employment are not included.

Source: Bureau of Economic Analysis Regional Accounts data

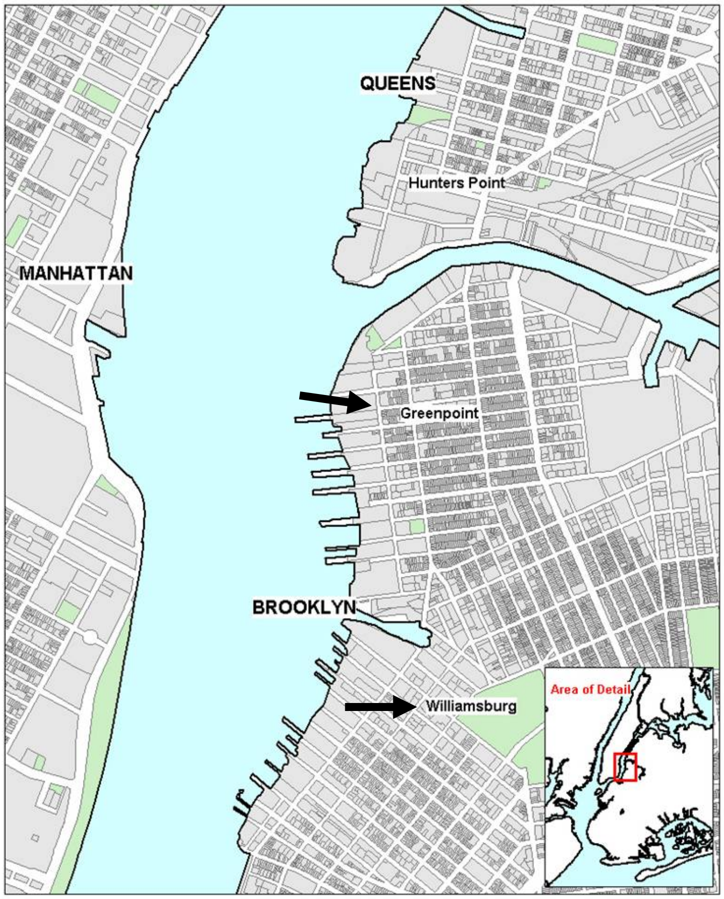
Table 2: Top 10 outer-borough areas, by number of industrial jobs 1993

District	*Number of industrial jobs*	*Density (jobs per acre)*
Hunters Point/Long Island City (Queens)*	20,346	52
Dutch Kills (Queens)**	16,815	57
East Williamsburg (Brooklyn)**	14,858	23
Sunset Park (Brooklyn)*	11,130	30
Long Island City East (Queens)**	10,971	23
Brooklyn-Queens Expressway Corridor**	8,890	35
Ridgewood/Middle Village/Glendale (Queens)	7,925	25
North Williamsburg waterfront (Brooklyn)*	7,728	23
Greenpoint/Newtown Creek (Brooklyn)*	6,225	25
Flushing (Queens)	5,983	31

* waterfront area
**area immediately upland from waterfront

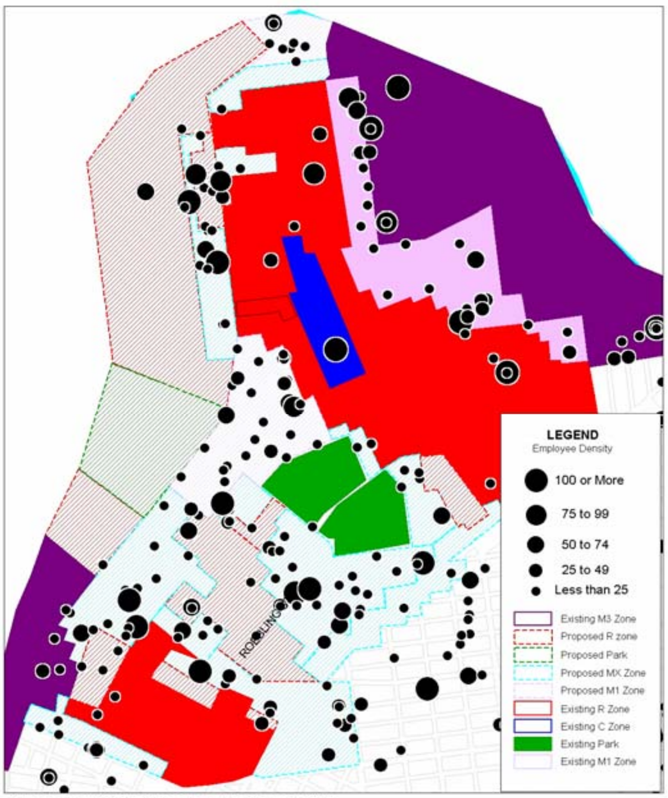
Source: Compiled from Citywide Industry Study, New York City Department of City Planning 1993

Figure 1: Williamsburg and Greenpoint, Brooklyn



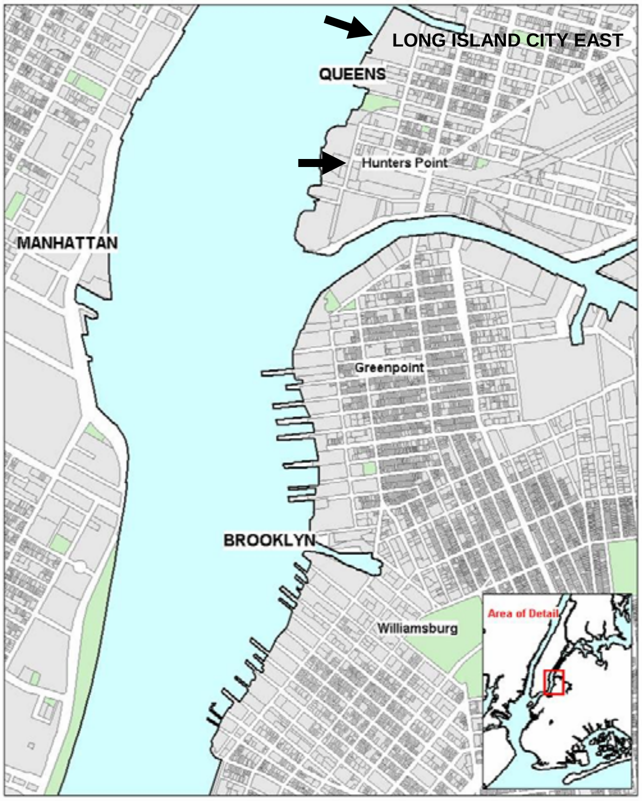
Source: Pratt Institute Center for Community and Environmental Development

Figure 2: Manufacturing Employers in Williamsburg-Greenpoint Re-zoning Area
(areas proposed for re-zoning are surrounded by dotted lines)



Source: New York Industrial Retention Network, 2003.

Figure 3: Long Island City and Hunter's Point, Queens



Source: Pratt Institute Center for Community and Environmental Development