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Submitted in partial fulfillment of the requirement for the degree Master of Science in Urban Planning
Graduate School of Architecture, Planning and Preservation
Columbia University
May 2013
The New-New York:
Up-zoning Neighborhoods in the Era of Bloomberg

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Acknowledgement:

I would like to thank my advisor Professor Robert Beauregard for his guidance in writing this paper as well as my reader Professor Elliot Sclar. Marlene Dubas for her help in editing this paper. My mother Marilyn Podemski and my grandmother Evelyn Ross.
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Abstract

In lieu of comprehensive planning, New York City uses zoning as its primary planning tool. Under the leadership of Mayor Michael Bloomberg zoning has been utilized on a massive scale to fundamentally alter the physical makeup of the city. Since his tenure began in 2002, 18% of the city has been rezoned. The rezoning has coincided with a large amount of private real estate development transforming former industrial areas and working class neighborhoods into mixed-use centers. However, zoning is limited in that it constrains the height and bulk of a structure but does not determine how it should further contribute to a community. This study analyzes the physical ramifications of the upzoning policy in order to determine whether new types of residential building typologies have emerged. Through GIS analysis and field work the neighborhoods of Williamsburg and Greenpoint in Brooklyn, where over 100 new residential buildings have been constructed since 2005, were selected as the study area. The new buildings built on upzoned lots in this area can be grouped into seven distinct typologies. The majority of these structures fail basic design standards showing that another level of planning is needed to help produce successful new urban neighborhoods.
Introduction

The New-New York

In lieu of comprehensive planning, New York City uses zoning as its primary planning tool. Since 1916 zoning has contributed immensely to the city’s urban form, shaping icons from the Seagram Building to Rockefeller Center. Under the leadership of Mayor Michael Bloomberg zoning has been utilized on a massive scale to fundamentally alter the physical makeup of the city. Since his tenure began in 2002, 18% of the city has been rezoned. The rezoning has coincided with a large amount of private real estate development. Former industrial areas and working class neighborhoods are now mixed-use centers and the urban core of the city has expanded to encompass portions of Queens and Brooklyn.

Development in New York is as-of-right making zoning the primary regulator of building form. This means that if a building complies with existing zoning and other regulations, it needs no additional reviews by the government or citizens group. However, zoning is limited in that it constrains the height and bulk of a structure but does not determine how it should further contribute to a community. How a developer chooses to respond to a zoning regulations will often be copied and replicated by other developers, who borrow ideas that appear to have been successful. What developers choose to build has broad ramifications, both for the people who live in the buildings and physical implications for the broader urban environment.

This thesis examines the physical repercussions of rezoning policy on one New York neighborhood, Community Board 1 in Brooklyn. By analyzing the purposes of the rezoning and how developers and architects have responded to the rezoning, the physical ramifications of this policy will become apparent. Examining the characteristics of new buildings on up-zoned land will give clues as to whether new types of residential building typologies have emerged. This information will determine if zoning alone is an adequate and appropriate tool to guide new neighborhoods that will accommodate a predicted one million additional residents in New York City by 2030.
Background
The Legacy of Zoning in New York City

New York City has had a history of far reaching planning and policy decisions determining the form of buildings since the 19th century. These decisions have had a major impact on both the broader urban fabric and the advent of new building typologies. A typology can be defined as “study of or analysis or classification based on types or categories.” Polices and planning influence the formation of building typologies because they place physical restrictions on structures. Architects and developers will create forms that abide by these restrictions, which are often replicated in other buildings. As Rafael Moneo states in his article, On Typology, “Struggle with an identical problem tends to lead to almost identical forms.” Typology also often connotes a deeper meaning beyond the geometry of a building but that of its function and construction. According to Giulio Carlo Argan, “An architectural type must be treated as a schema of spatial articulations which has been formed in response to a totality of practical and ideological demands.”

New York’s building typologies have developed over time to respond to the practical demands of the economy, circulation, and policy, as well as the ideological demands of planners and architects.

The 1811 Commissioners Plan has had a huge influence on the form of New York City buildings. This plan created a city grid with North-South avenues that create narrow and long blocks. These blocks were platted into 25 by 100 foot lots. Thus, in New York, a narrow lot size formed the basic template for the form of subsequent buildings. As housing became denser it evolved from single family row houses, to multi-family tenements, to high rise apartment buildings.

The overcrowded and unsanitary conditions inside tenement buildings led to a series of housing reforms dictating the architecture of residential structures. The narrow lot size caused the earliest tenements to be built flush with each other, limiting access to air and light. The interior living spaces that resulted were so unhealthy that the 1879 Tenement House Act mandated the creation of air shafts on the sides of the buildings and limits on lot coverage. However, this law was insufficient to make tenements sanitary. The 1901 Tenement House Act placed even stricter constraints on lot coverage, air shafts, and the dimensions of dwellings. It also mandated that every apartment have running water and every room have a window [Figure 1]. The 1901 act or “new law” effectively set the standard for tenement design because it carefully balanced the interests of real estate developers and the welfare of the general public.

The first zoning code in 1916 regulated land by use and controlled the density and configuration of buildings. This had an outsized impact on the city’s architecture. At the turn of the century, a lack of regulation caused land uses to be in perpetual state of flux with commercial, industrial, and residential developments competing for and intermingling on prime sites. The expanding subway system also concentrated large-scale development around new stations, blocking out sunlight. This zoning code not only addressed the health, welfare and economy of the city, but also reflected the values of the City Beautiful movement, codifying its

5 Plunz, Pg. 49
design principles into policy. These regulations included relating building heights to street widths through the “sky exposure plane” which required buildings to be set back in order for light to reach the street [Figure 2].

The 1916 zoning code had an enormous influence on the design of buildings, resulting in a “New York Style” typified by the “wedding cake” form that many buildings from that era exemplify [Figure 3]. The influence of the 1916 zoning can be seen in some of the city’s most famous structures, such as the Empire State Building. Ironically, the code also contributed to a dramatic increase in skyscrapers after World War I because it created an envelope around buildings in Manhattan that developers felt obligated to fill with buildings that were as large as possible. For example, the tower portion on top of the initial base of a building had no height limitation as long as it was set back in such a way that it occupied no more than the equivalent of 25% of the building’s lot. If the city was built out to the full extent of the code, it could accommodate 55 million people, a testament to the permissiveness of the 1916 zoning code.⁷

Just as the 1916 zoning code formalized the architectural principles of its time, so too did the 1961 revision. Before the creation of the City Planning Commission in 1936, zoning matters were subject to special interests and were often seen as corrupt.⁸ During this period, sentiment arose to reform the zoning code in order to have a more comprehensive planning strategy, especially in regards to density. This notion was paired with a mounting fervor within the architectural and planning communities to replace the zoning code with a new one that was more in line with the principles of the Garden City and Modernist movements.⁹ The old zoning code was seen as preventing new forms of architectural expression (in particular the creation of slender “towers in the park” that were gaining popularity in Europe) in favor of endless repetition of oversized buildings.

By 1961, a radically different and much more comprehensive zoning code was created for the city. Whereas the 1916 code broke down land into three uses; commercial, residential, and unrestricted (encompassing mostly industrial uses), the new code divided land into forty-seven categories. The city of 55 million people envisioned by the 1916 code was shrunk to a more manageable 12,273,000 under the new code. Most critical for the shape of buildings was floor area ratio (FAR). Previously, the height and bulk of a building was based on the width of the adjacent street it was on. FAR mandated height and bulk be based on lot coverage [Appendix E]. This new standard would have a large impact on the look of new buildings and their relationship to the broader urban environment. Robert Stern goes so far as to state that “the passage of the new zoning was postwar New York’s pivotal architectural event, irrevocably changing the relationship between buildings and the streets that had prevailed for over three hundred years.”¹⁰ The 1961 code perpetuated slender set back towers, many of which were actually far taller than earlier buildings in certain areas due to density bonuses achieved through the creation of public plazas on private sites [Figure 4]. However, the code reduced density in certain residential areas. For example, “a 15,000-square-foot, 100-by-150-plot on East Sixty-third Street, which would be have supported 154 apartments under the old rules, could contain only 115 units under the new; to achieve the old number an additional 5,000 square feet of land would be needed. Even more dramatically, a similar plot in upper

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⁸ Makielski, pg. 41
¹⁰ Stern, “New York 1930” pg. 130
Manhattan in the new R7-2 zone would result in only forty two apartments, whereas fifty-six would have been permitted before.” 11

The Origins of the Rezoning

Just as in 1916 and 1961, the rezoning under Mayor Bloomberg occurred during a pivotal time in the city’s development. Postwar New York experienced a wave of suburban flight and de-industrialization which reduced the population to an all-time low of approximately seven million residents in 1980. The city’s economy was also reorienting itself from industry and manufacturing to the FIRE industries of finance, insurance, and real estate. This new economy demanded a restructuring of urban space to cater to the lifestyles of the workers in these industries.12 The redevelopment of industrial and manufacturing areas was seen as a way to achieve this. Nevertheless, the zoning code restricted this from happening. A coalition of business interests and government officials advocated for a new economic development strategy centered around redevelopment. The city’s decaying industrial waterfront in Queens and Brooklyn, with its views and close proximity to service firms in Manhattan, were seen as prime targets for the expansion of business and residential developments.13

By the time of Mayor Bloomberg’s election, New York was in the midst of a dramatic resurgence. The population had recovered to its pre-1980 levels and is predicted to grow to 9.1 million by 2030.14 Bloomberg embraced the strategy of using redevelopment to propel the city’s economy and competitiveness. He also saw it as a way to absorb the population influx and keep the city affordable.

However, this radical transformation of the city envisioned by Bloomberg was an arduous and time-consuming process that would potentially take his entire term as mayor. In order to get the rezoning pushed through in as short of time as possible a bid to host the 2012 Summer Olympics was used to expedite many of the proposed elements of the rezoning. An Olympic bid requires detailed plans of where facilities will be placed, including housing and transportation. In doing this plan, a team lead by investment banker Daniel Doctoroff focused Olympic facilities in seven underutilized areas, many of which had already been targets for redevelopment by the city’s business leaders. When Mayor Bloomberg was elected, he appointed Doctoroff as Deputy Mayor for Economic Development and Rebuilding, overseeing development, the rebuilding of Lower Manhattan and planning. Almost all of the areas targeted for Olympic facilities have had major rezoning including downtown Brooklyn, the East River waterfront, and the west side of Manhattan. Doctoroff has called the Olympic bid the “genesis for the efforts” to rezone.15

The Bloomberg Rezoning

The New York Olympic bid failed in 2005; however, the strategy of redeveloping large parts of the city was repackaged into a new plan. In 2007, PlaNYC 2030 was published by the office of Long-Term Planning Sustainability.16 A major component of this plan was to “Create homes for almost a million more New Yorkers.”

11 Stern, “New York 1930” pg. 130
16 This is a department created by the Bloomberg administration in 2006 to implement and track the policies of PlaNYC.
This was seen as a way to keep the city affordable: “Increasing capacity also aids housing affordability, because when supply cannot keep up with the demands of growing population housing becomes less affordable.” The strategy of linking affordability with housing production had been championed by free market economists, most notably Edward Glaeser. Glaeser has attributed the steep rise in housing costs in select markets in the U.S. (including New York) to regulations which limit construction. Glaeser is also part of an emerging group of academics who champion density as a key to economic growth. Density is seen as a panacea for a whole range of ills from obesity to environmental degradation to economic stagnation. This group champions extremely high densities and, in Glaeser’s case, view’s planning, and historic preservation regulation as barriers, to achieving this density and thus unlocking the resulting growth opportunities. As a result of this policy, over 9,400 blocks have been rezoned, equal to 18% of the city’s land area affecting the neighborhoods of 2.1 million New Yorkers. PlaNYC is not a comprehensive plan similar to ones produced in Oregon or California. Rather it is a strategic plan prepared not by the planning department but the Economic Development Corporation “The plan looks more like a strategic planning report for a big company anxious to save money on energy than a blueprint for city government.”

While PlaNYC articulates a vision of producing more housing which will in turn create a more sustainable city, it does not provide architectural principles for these new buildings or the physical or social qualities of the new rezoned neighborhoods. Whereas the 1916 and 1961 codes were driven as much by architectural values as social and economic imperatives, the ideals of PlaNYC have no such frame. This laissez-faire approach of promoting density, while not providing a vision for how it should look or contribute to the city, leaves developers responsible for the form these new areas will take. Many other cities, such as Los Angeles and San Francisco, have taken a more prescriptive approach where they not only dictate how new development should fit into the city, but also how development should contribute to the civic and social realm.

Zoning is critical for the built form of the city because it is the primary level of review for new built structures. In New York, development is as-of-right meaning if development complies with applicably zoning regulations it can be built without additional review. “An as-of-right development complies with all applicable zoning regulations and does not require any discretionary action by the City Planning Commission or Board of Standards and Appeals. Most developments and enlargements in the city are as-of-right.” The result is that once an area is rezoned, community groups or even government officials have little or no recourse to influence a building’s design. This is unlike many other cities that require some sort of additional review for new construction. The system of as-of-right development in New York has been criticized for favoring the interests of the real estate industry over community needs.

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The rezonings are not just related to increasing density. In some cases, they lowered density and in others they simply altered the form of the building without changing its size. The latter change is related to altering the 1961 zoning in certain areas to ensure that new development is “contextual” with the surrounding urban form. For example in an area of 7-story tenements, instead of allowing the construction of a 20-story slab set back from the street, as would be allowed under the 1961 zoning, the new construction would have to continue the street wall and blend with the existing fabrics. In some ways, this is a return to the forms produced by the 1916 zoning code. More than half of the lots have been contextually rezoned. Of these, nearly a quarter were down-zoned, and a little over ten percent have been up-zoned. However, the added capacity of the up-zoned lots outweighs the lost capacity of down-zoned lots, which if entirely built out could accommodate an additional 200,000 residents.

The way neighborhoods have been rezoned is not always equitable. Down-zoned lots tend to be predominantly concentrated in areas with a higher than average percentage of white residents than up-zoned or contextually changed lots and there has been a backlash against the rezonings in some of these communities. In 2009 the city created a rezoning proposal for Sunset Park Brooklyn, a largely immigrant neighborhood that is rapidly gentrifying. Median home prices have risen from $400,000 to $700,000 from 2003 to 2009. Highlighting the trend of rezoning following development, the city planning department proposed a large-scale zoning change in 2009. The proposed rezoning affected 128 blocks and up-zoned the main avenues allowing increased commercial and residential development. This prompted an outcry from the neighborhood which believed that the rezoning would bring more development and hasten displacement of existing residents. A housing rights organization, South Brooklyn Legal Services, along with several other advocacy and community organizations filed a lawsuit against the rezoning. However, the courts dismissed the lawsuit. That decision was appealed, which was also defeated in a 3 to 2 decision.

Similar opposition to the rezoning occurred in Manhattan. In 2008, the city proposed a 114 block rezoning of the East Village and Lower East Side. This rezoning actually involved limiting the scale of development which then elicited an outcry of racism from activists in neighboring Chinatown who felt this proposal would push development and displacement into their community. They felt that the boundaries of the down-zoning only included the white areas of the neighborhood and should have included the entire Community Board District.

The rezonings have had little impact on affordability. Since Mayor Bloomberg has taken office in 2002, the rate of housing production has increased yet affordability has decreased. The rate of housing production between 2005 and 2008 nearly doubled over the 2002 to 2005 rate. Between 2002 and 2008 over 108,834 units were built. 40% of these new units were in Brooklyn, with Manhattan and the Bronx showing slight increases and Staten Island and Queens declining in housing production. The vacancy rate declined over this period and

27 “Sunset Park Voices in the Rezoning Process” Pratt Center for Community Development December 2007
32 “Key Findings on the Affordability of Rental Housing from New York City’s Housing and Vacancy Survey 2008.” The Furman Center, June
today is the lowest in the United States at 1.8% compared to over 4% nationally.\textsuperscript{33} In addition the percentage of the population that was rent-burdened rose from 46.9% to 52%. The rent burden rate has continued to rise and today it is the highest on record.\textsuperscript{34} Between 2002 and 2008 the amount of rental units affordable to low income residents declined while the amount of rental units affordable to high income residents rose. Since 2008 median household income has declined while median monthly rent has increased. The number of affordable units built from 2002 to 2010 has also declined by more than half and was almost entirely produced by the Low Income Tax Credit program.\textsuperscript{35} PlaNYC’s goal is to create homes for 1 million New Yorkers by 2030. Assuming new units have 2.61 residents per unit which is currently the city average, 15,240 would have to be produced per year over the 25 years from 2005 to 2030. The city exceeded this amount between 2001 and 2008 but since then has fallen short of this number.

\textbf{Community Board 1 Rezoning}

The neighborhoods of Greenpoint and Williamsburg, which make up Community Board 1 in Brooklyn [Figure 5], have experienced some of the most profound effects from the Bloomberg administration’s rezoning. This area is an historic center of industry and an immigrant bastion which has over the years housed Puerto Rican, Jewish, Polish and Italian immigrants among many others. However, industrial decline and its close proximity to Manhattan have made it increasingly enticing to developers. Since 2005, three rezoning’s have taken place in this area resulting in over 100 new residential buildings. These rezoning have fundamentally reshaped the district introducing new building forms and a new demographic into the area. The median sales price has gone from $144,785 in 2000 to $317,000 in 2011. Between 2000 and 2010 the white population has gone from 50% to 60% and the Hispanic population has decreased from 30% to 20\%\textsuperscript{36}

Pressure to create a plan to guide development along the Williamsburg and Greenpoint waterfront started in late 1980’s. The catalyst was a proposal to site a waste transfer plant in the neighborhood. However, a larger transition was also happening due to the decline in manufacturing and rise in residential loft conversions.\textsuperscript{37} This trend going back to the 1970’s when the city rezoned portions of the Williamsburg waterfront and Franklin Avenue in Greenpoint to accommodate converted lofts. A New York Times article from 1987 speaks of the flux the neighborhood was undergoing at the time. Artists were slowly trickling into the neighborhood from the East Village and massive redevelopment was still a faint, but somewhat unrealistic idea. One person interviewed said that people envisioned the area as the next SOHO but that it would take a long time, if ever, for that to happen. At the time, a developer was proposing over 2,000 apartments and 120,000 square feet of light industrial space along the waterfront. However in the late 1980’s, city officials still believed Williamsburg had a future as an industrial center. “Our concern in particular with Williamsburg is that it is an active industrial area and has been quite stable for the past 25 years,” said Wilbur L. Woods, director of the Brooklyn Office of City Planning.

\begin{figure}[h]
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\caption{New York City Region}
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\textsuperscript{34} New York City Rent Guidelines Board. “2012 Income and Affordability Study.” April 5, 2012
\textsuperscript{36} Been, Vicki. “State of New York City Housing and Neighborhoods 2011.” Furman Center, 2011.
“In recent years, we have seen a drop in the amount of vacant space, and new firms are coming from Manhattan and Long Island City.” 38 By the 1990’s it was clear that the area required a more comprehensive approach to guide its transition from industrial hub to residential community.

Community Board 1 initiated two 197-A plans for the Williamsburg waterfront and Greenpoint that are officially recognized by the city government and must be approved by both the planning commission and city council. 39 The goals of the waterfront plan called for a stronger connection to the river, that growth along the water be mixed use, be consistent with the scale and character of the neighborhood and that development promote economic growth that creates opportunities for existing residents and recognizes the diversity of the community. The plan was adopted by the city in 2002. The Greenpoint plan also emphasized that the waterfront be turned into an accessible open space and called for rezoning of vacant and underutilized waterfront land to accommodate new development. 40

After the passage of the Williamsburg Waterfront 197-a plan the city began planning the waterfront rezoning. In the justification for the rezoning, the city mentions the loss of industrial jobs in CB 1 which fell by 40% between 1991 and 2002, and the rise in illegal and legal loft conversions. The rezoning covered two areas, one directly along the waterfront referred to as the “waterfront” and one several blocks inland from the water referred to as the “upland area.” The goals of the rezoning included reconnecting the neighborhood to the river, creating a transition from low rise buildings to high rises, creating a varied and compelling skyline and encouraging a variety of built forms that promote high quality architecture and urban design. The goals also emphasized that new development should enhance the public realm by creating pedestrian friendly streets. 41

Much of the upland area was rezoned to R6-A, a contextual zone that allows six to seven story buildings [Figures 6]. Small portions of Greenpoint, where three to four story high buildings predominate, were rezoned to R6-B. This zone requires that buildings maintain a street wall with neighboring structures. Typically buildings in this zone are four to five stories. The block bounded by Bedford Avenue, North 12th, North 11th, and Driggs Avenue was rezoned to R7A which allows for 6 to 8 story buildings. This allowed the largest buildings of any upland rezone and [Figure 7]. The rationale for only rezoning this one block to R7A is that the site was vacant and that it could offer “significant potential for new housing development.” 42

The 197-A Plan called for shorter buildings along the waterfront; however developers said that the allowed FAR would make development at these sites infeasible. This is because additional construction costs are involved in building along the water’s edge. Producing park land along the waterfront, which the zoning plan had developers pay for, added an additional expense. Negotiations were held between planning staff and developers and a FAR of 4.7 was agreed upon which would balance developer cost and profit. An inclusionary housing program was also created at waterfront sites that gave FAR bonuses for the inclusion of affordable housing. 43 The result was a blended R8/R6 zone proposed along the waterfront. Low-rise affordable housing could be put into the R6 zone along Kent Avenue in order to gain extra height for the R8 zone facing the river. The R6 zone would

42 New York Department of City Planning. “Greenpoint-Williamsburg Rezoning: Upland Areas- Proposed Upland zoning District,
43 Just Moore, Senior Urban Designer Department of Urban Planning Interview
also act as a podium buffer stepping down from the tower to the rest of the neighborhood.

The rezoning proposal was criticized by many community members. Congresswomen Nydia Velazquez said that the towers along the waterfront were too high in a low-rise neighborhood and that the city “cannot afford to have an economy solely dependent on the development of new high-end residential development.”44 A water advocacy group, Riverkeepers, also criticized the plan as introducing out-of-character development.45 However, the rezoning was hailed by Mayor Bloomberg who said that it would “ensure that the reuse of this priceless but long derelict waterfront will be for the purposes of housing and recreation and not for such inappropriate uses as waste transfer stations and power plants.”46 The plan was adopted on May 14th, 2005.

Because of the size of the Greenpoint-Williamsburg rezoning, planners were not able to develop a rezoning plan for the interior portions of the neighborhood. Community advocates were promised that the rest of the neighborhood would be rezoned immediately after.47 This rezoning took place in 2009 and affected the more residential, inland portions of the neighborhood. The Greenpoint-Williamsburg Contextual rezoning covered 175 blocks in Greenpoint and the portions of Williamsburg east of the Brooklyn Queens Expressway. Rather than being made up of manufacturing areas, this neighborhood is largely composed of small row homes and apartment buildings dating from the 19th and early 20th century. The 2005 and 2009 rezonings resulted in a large share of Community Board 1 being rezoned.

Developer interest in Williamsburg pushed beyond the waterfront into the interior of the neighborhood in the 2000’s leading to a large amount of new construction. However, due to the fact that over 90% of the neighborhood was still under the 1961 zoning, many new buildings were greatly out of context with the existing urban fabric [Figure 8]. This resulted in narrow, set-back towers reaching upwards of 12 stories popping up amidst the traditional 3 story row houses in the neighborhood.48

The 2009 rezoning aimed to curb the out-of-scale buildings by implementing contextual zones. However, wrapped within this rezoning was an up-zoning of parts of the neighborhood. Narrow side streets were rezoned to R6 B, which forced new construction to be contextual while not really changing the allowed FAR [Figures 9 and 10]. Wide streets were rezoned to R6A. These two contextual zones comprised 86% of the rezoning. However, 9% of the rezoning was up-zoned to R7A. This rezoning took place along major commercial corridors such as McGuinness Avenue, Metropolitan, Union, and Grand Street. Whereas R6 has a maximum FAR of 3 on wide streets, R7A has a maximum FAR of 4. These new R7A zones were also included in the Inclusionary Housing program which allowed the FAR to rise to 4.6 if affordable housing is included.49

Rivaling the Williamsburg Waterfront rezoning in controversy, the Broadway Triangle Rezonings have an added economic and religious dimension. The triangle is in the southern section of CD 10, bordered by Broadway, Union, and Flushing [Figure 11]. Once home to Pfizer Pharmaceuticals, this area now largely consists of vacant lots and small industrial facilities and there have been attempts to redevelop the neighborhood dating back to 1989. However, this area also lies on the ethnic fault lines between three neighborhoods; the largely African

45 Riverkeepers. “Greenpoint/Williamsburg Rezoning Project.” 2013
47 Justin Moore, Senior Urban Designer New York City Planning Department Interview
American Bedford Stuyvesant to the South, the largely Hispanic Bushwick to the East and the largely Hasidic Jewish South Williamsburg to the North. The complex political and racial dynamics involved in redeveloping this area have earned it the nickname “Bermuda Triangle” by city planning officials. In 2009 the Department of Housing Preservation and Development (HPD) proposed a rezoning to create 1,851 new units of housing, 905 of which would be affordable [Figure 12]. This was seen as a way to remove blight and bring needed housing to the area. This rezoning was handled by the Department of Housing Preservation and Development because the politics of the area made it too difficult to do a comprehensive rezoning plan. Because any landowner in the city can petition for a new rezoning this has led to a lot of ad-hoc development in the area that largely splinters along ethnic lines.

Development rights were given through a no-bid contract to United Jewish Organizations of Williamsburg and Ridgewood Bushwick Senior Citizen Council. This prompted a lawsuit from over 40 community groups claiming that the rezoning was discriminatory because it favored Hasidic Jewish groups over other residents and that the process was flawed because development rights were given to politically-connected groups. The suit also had a specific typological dimension with opponents claiming that the shorter buildings mandated by the rezoning favored orthodox Jews who cannot take the elevator on Shabbos and that the apartments that would be built would have many bedrooms to accommodate their large families. The rezoning was still approved by a wide margin by the city council in December of 2009. Almost immediately, a judge passed an injunction preventing the city from moving forward with the rezoning. The plan has further been scuttled due to a corruption investigation of Assemblymen Vito Lopez who presided over the no bid contracts.

In spite of the ongoing legal battles relating to the redevelopment of the Broadway Triangle, rezoning of the area did occur and development has taken place. This is because in New York, property owners can request a rezoning of their land. A 15 block area bounded roughly by Marcy, Lynch, Boreum, Graham and Flushing Avenue in the southern portion of Williamsburg has been rezoned from manufacturing uses to R6 residential. Three of these blocks were rezoned at the behest of Walton Realty Associates in 2012. The Borough presidents agreed to this rezoning in order to facilitate the construction of 69 units in two new buildings.

A lack of a comprehensive plan has opened up New York’s zoning policy to criticism that it has allowed developers to rebuild huge portions of the city without guiding what form it will take and what effect it will have on the city. “The absence of comprehensive planning leaves New York City without the foundation for sound future growth. Neighborhoods pay the price when development overloads their streets, schools and services.” Former City Planning Commissioner Ron Shiffman has also called the rezoning “developer driven.” This lack of direction from the city puts developers in charge of the types of neighborhoods the rezoning will ultimately produce, with the city merely dictating its size. What form will 18% of the city that has been rezoned take, and
what will be the repercussions for neighborhoods, residents, and the city’s urban fabric?
Literature Review
This paper deals with two intertwined subjects: (1) zoning and building regulations, (2) and urban development in New York City. Over its history New York City has experienced large bursts of growth. This has given rise to competing notions about how to handle this growth. One side contends that New York City is too big and dynamic to plan and that regulations should promote growth because it is the economic and cultural life blood of the city. The counter to this argument is that unregulated growth is destroying the character of the city and leading to a city built only for the rich. Another issue related to growth and regulation is the typology of buildings which is often related to market conditions.

Growth

Growth has traditionally been championed by the city’s real estate and business community. Increasingly, a group of academics have also started to champion limiting regulations to promote density. Their argument is that density is more sustainable, contributes to economic vibrancy and promotes affordability. One of the leading proponents of this movement is Edward Glaeser, an economist at Harvard University. In his book Rethinking Federal Housing Policy: How to Make Housing Plentiful and Affordable he argues that over regulation particularly in coastal cities is contributing to unfordable housing markets. This is because these regulations increase the cost to build housing beyond land prices. In Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier Glaeser makes a case for density. This argument is that density is more sustainable for the environment, is healthier because people rely on walking as opposed to driving, and contributes to economic vibrancy because of agglomerations. He also argues against regulation, particularly historic districts, which hinder possibilities to create density.

Another academic who champions density is Vishaan Chakrabarti, who is a professor in real estate at Columbia University. Chakrabarti calls for sweeping reforms in both local and federal policy to promote density. In doing so he says a more equitable and sustainable country will emerge. His argument also takes a stand against low density sprawl and promotes new infrastructure that fosters density such as mass transit and high speed rail. Both Chakrabarti and Glaeser use New York City as their subject to examine the possibilities of density as well as the regulations and policy’s that undermine it. Several other studies have been released trying to quantify the benefits of density. A study released by the Federal Reserve Bank of Philadelphia linked urban density with a 20% increase in patents per capita.

Economic Development and Gentrification

Other commentators contend that real estate development has contributed to the economic and cultural homogenization of New York. This argument mainly centers around the fact that growth and real estate development has served wealthy residents at the expense of the middle, working, and lower classes. Development has lead to local businesses being replaced by chains and artists and low income people being pushed out of their homes.

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60 Glaeser & Gyourko
61 Glaeser
62 Chakrabarti
prime areas. The city’s manufacturing and industrial economy, which supports working class jobs, has been replaced by a land based economic development model that favors high wage service firms.

The article “Up-Zoning New York City’s Mixed Use Neighborhoods: Property Based Economic Development and the Anatomy of a Planning Dilemma” by Laura Wolf-Powers frames the Bloomberg rezoning within the context of land based economic development policy. This policy was a conscious shift to move manufacturing and industry out of the city so it could be redeveloped, primarily to serve the service sector industries. She uses the Williamsburg waterfront as an example of an area that used to be home to industry and manufacturing and which is now home to high density residential units for upper income residents.

Another series of works discusses the social ramifications of this reorientation to the service sector. This includes From Welfare State to Real Estate: Regime Change in New York City 1974 to Present by Kim Moody and Naked City: The Death and Life of Authentic Urban Places by Sharon Zukin. Most of this work takes a critical look at land-based economic policies and the reorientation of the city’s economy. These authors see these changes as contributing to the displacement of working class and poor residents and the remaking of the city into a life-style center that caters to the very rich.

Development Regulations

In tandem with the arguments over a permissive approach to development vs. equity and neighborhood character is a debate about the role of design regulations on development. Many cities have adopted strict guidelines on the form of new buildings. Many of these policies have their origins in several seminal texts from the 1960’s, 1970’s and 1980’s most notably the book The Death and Life of Great American Cities by Jane Jacobs. In this text she celebrates how the traditional built form of New York’s neighborhoods contributes to its vibrant street life and contrasts this with modernist design principles. Other notable early examples extolling the benefits of good urban design include Oscar Newman’s book Defensible Spaces which describes how certain designs contribute to crime and blight. Principles from this book have been incorporated into official policies of the Department of Housing and Urban Development. William H. Whyte’s book The Social Life of Small Urban Spaces evaluates qualities that make public spaces and environments attractive. Its ideas have been incorporated into the designs of many public spaces including Bryant Park.

These books, among others, form the ideological basis for the Smart Growth and New Urbanism. Smart Growth is an amorphous term promoted by a disparate assortment of groups that include environmentalists, planners, and policy makers as well as economists. Originating out of the 1990’s, smart growth, came to embody a response against the predominant suburban development happening in cities and regions, “Smart growth

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65 Wolf-Powers
66 Wolf-Powers
68 Zukin
aims to create more compact development that is cheaper to service, less land consumptive, and more attractive than sprawl."73

While smart growth has little in the way of specific guidelines74 New Urbanism is a powerful facet of this movement which advocates for a return to architecture based on historic and vernacular building and planning styles. The guiding principles of New Urbanism are collected in The Charter of New Urbanism which is a mission statement as well as a framework for how the movement views planning, design, development, and policy. Point number 24 of the charter lays out the role that typology plays in the movement: “Architecture and landscape design should grow from local climate, topography, history, and building practice.”75 New construction should be based on the historic building types of the area where it is being built. Seaside, FL, one of the most famous examples of New Urbanism planning and architecture is based on the vernacular houses of the Gulf Coast region. The town’s building code clearly outlines design features of new construction such as windows, roofs, and materials with the goal of having new construction reference regional vernaculars.76 New Urbanism is considered one of the most influential movements in architecture and planning since modernism, being widely used in many contemporary developments. The fact that it references traditional and regional typologies has made it conducive for new infill development.77 New Urbanists have played essential roles in Federal policy such as HOPE IV as well as municipal policy including an overhaul of the Miami zoning code. Controls on the design of buildings have been met with a sharp backlash from the architectural community which says they are antiquated and curtail design innovation.

New Urbanism and Smart Growth have been strongly opposed by certain elements in the architectural community, most notably Rem Koolhaas. Koolhaas feels that the city has outgrown any comprehensibility and therefore is impossible to regulate: “(the city) outwits all attempts at capturing the city, exhausts all ambitions of its definition, ridicules the most passionate assertions of its present failure and future impossibility, steers it implacably further on its flight forward.” He sees attempts to embrace historic models of urbanism, like New Urbanism, as a totally outdated to the realities of the contemporary city, “the belated rediscovery of the virtues of the classical city at the moment of their definitive impossibility may have been the point of no return, fatal moment of disconnection, disqualification. They are now specialists in phantom pain: doctors discussing the medical intricacies of an amputated limb.” 78

Ellen Dunham Jones, a professor of architecture at Georgia Tech and one of the leaders of the New Urbanist movement, equates Koolhaas’ ideas to a linking of architecture and free market capitalism. Jones views Koolhaas as equating the rapid change of cities with capitalism and his view that the city cannot be controlled or planned.79 She feels that Koolhaas’ permissiveness has little regard to the damage it causes socially and environmentally and provides little control for citizens on the look and feel of their communities.

73 Daniels
74 Smirniotopoulos, Peter. “Smart Growth.” Journal of Housing and Community Development.
Architectural Development of New York City

The relationship between zoning and regulation and New York’s built environment is well documented. These texts outline how regulation and zoning in particular have contributed to the unique physical character of the city. These scholars depict New York as being oriented around real estate development which has often taken place in bursts. Reforms have often been unable to tame development or have been stymied by it. Where reform has been successful, it is often because it has worked with developers or some sort of consensus has been made between disparate groups. This framework puts the rezoning strategy within a long history of policies that aimed to shape the urban environment in New York.

The architect Robert A.M. Stern has completed a series of books analyzing eras of New York architecture including New York 1930 and “New York 1960. These books explore the origins of the 1916 and 1961 zoning codes and their impact on the city’s built form. They also discuss different buildings typologies that were built during those eras. A History of Housing in New York City by Richard Plunz discusses the development of the city’s housing from the original New Amsterdam colony to present. This book outlines how political, social and economic issues influenced housing forms and the evolution that housing forms has taken through the city’s history. This puts the rezoning in a long context of zoning, policy, and architectural decisions that have shaped the form of the city’s buildings.

Typology

At the intersection of development and regulation is the production of architectural building types or typologies. This is relevant to this discussion because environmental, regulatory, economic, and social factors tend to contribute to the production of similar structures. These structures often have physical and social ramifications for cities. Typology is defined as “study of or analysis or classification based on types or categories.” When applied to architecture, this concept has been a source of contention due to the difficulty of categorizing structures. This difficulty arises because buildings are unique responses to common problems that often lead to similar but not identical solutions.

Typologies develop to meet new social conditions necessitating new building forms as well as technological innovations that make new building forms possible. Because of this process, the same type of building tends to be repeated until an innovation or breakthrough necessitates change. However, typologies allow for endless variations and typological groups can be broken down into smaller and smaller classifications.

The modernist movement rejected the notion of typology in favor of a functionalist approach to architecture. Before the modernist movement in the early part of the 20th century, architectural training revolved around learning certain techniques and building forms. The modernist movement broke away from architecture based on historic templates, “Thus when Gropius dispensed with history, claiming that it was possible to undertake both the process of design and positive construction without reference to prior examples, he was

80 Stern, 1930
81 Stern, 1960
82 Plunz
83 Merriam-Webster
standing against an architecture structured on typology.”"84 Modernism advocated for an architecture rooted in the constraints of a specific site. In this way architecture would be free of historic precedents and could create “pure space.”
Research Methodology
This paper’s research question is to determine the characteristics of new residential buildings built on upzoned, or rezoned parcels since 2001. In order to answer this question, I had to identify what parcels had been rezoned or up-zoned and where new residential construction has taken place. Since it is infeasible to do an exhaustive study of all new buildings built on upzoned parcels since 2001, the study area was confined to the community board where the most new residential buildings have been constructed on upzoned parcels.

The research consisted of four tasks: 1) GIS analysis, 2) field work, and 3) interviews and 4) evaluation. The GIS analysis refined the study area by determining what areas had been rezoned and where residential construction on upzoned lots had taken place. The field work documented, with photographs and field notes, each new residential building that had been constructed on an up-zoned lot. I then identified the characteristics of the new structures such as number of units, number of floors, and design characteristics. The interview phase gave context to the rezonings. The evaluation phase analyzed the discovered typologies in order to make recommendations on rezonings. This research methodology was approved by the chair of the Columbia University Institutional Review Board on February 19, 2013.

**GIS Analysis**

In order to determine what areas had been rezoned, New York City zoning data was collected for 2002 and 2013. This data consisted of GIS shape files showing the zoning designations of each parcel in the city in the years 2002 and 20013. The study was narrowed to zoning districts that allowed residential construction. These zones were determined through the Zoning Handbook. Each residential zone was then coded by its maximum FAR. Areas that were zoned residential in the 2013 zoning but were not zoned residential in the 2002 zoning were coded at 0 FAR. The 2013 maximum FAR was then subtracted from the 2002 maximum FAR. Areas with a positive numbers were designated upzoned and areas with a negative number were designated down-zoned.

In order to determine what new construction had taken place on upzoned lots, 2011 New York City PLUTO was used to see where new residential development has been constructed. PLUTO data is collected by the New York City government making it one of the most accurate data sources on building information. All new construction built after 2001 that contained residential construction was isolated into a new file. I then sorted this data to find the structures that were built on up-zoned lots. These buildings were then sorted based on when the rezoning had occurred. For example, if rezoning had taken place in 2006, all structures built between 2002 and 2005 were deleted from the study. The data was collected using zoning information on the New York City Department of Planning website. New residential construction was then analyzed to determine which Community Board district had received the most new residential construction on upzoned lots based on both number of buildings and number of units. Community Board districts are used for the study area because they are the level at which neighborhood planning is done in New York City.

The GIS analysis has several limitations because the study is focused on multifamily structures. The reliance on FAR to quantify the rezoning may have left out rezoning involving single-family detached structures. These structures often have the same FAR and density as determined through regulations on lot size and lot setbacks. In these cases the rezoning may have altered minimum lot size and setbacks and not FAR. These

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structures were not included in the analysis because the rezoning policy mainly targets multifamily structures. A second limitation posed by using FAR to quantify the rezoning is that this number can change based on factors such as whether affordable housing was included or FAR transfers added. These effects were not taken into consideration because rezoning usually involves major changes in zoning that would be much larger than the marginal ones affected by these changes. The final limitation is that the PLUTO data contains inaccuracies in terms of when buildings were constructed and regarding their physical attributes. I assumed that these inaccuracies would have a minimal impact on my data collection because I am looking at recently-built structures that should have more accurate entries. Further, the field work and analysis phase revealed and corrected many of the flaws in the PLUTO data.

Field Work and Analysis
Field work consisted of documenting new residential construction on upzoned lots in the study area. This was done on February 6, 2013. Each structure in the study area was photographed and notes were taken on its characteristics including its height, buildings materials used, and other distinguishing characteristics. The photographs were then compiled based on the address and put into a spreadsheet. Internet research was done to determine the architect and developer of each structure. Information was then gathered using PLUTO data and WIN2 data on the number of units, floors, and square footage of each building. The buildings were also compiled into categories based on their basic typology such as perimeter block, tower, and lot building.

Interviews
An interview was conducted to gain further insight on the rezoning policies in Community Board 1. This interview provided background on the history of the rezoning process as well as the intentions of the process. It also provided information that was not accessible in available documents on the rezoning [Appendix A].

Evaluation
In order to create a way to evaluate typologies, I reviewed eight infill design guidelines and created a matrix of common qualities. The guidelines were for large to medium density infill development. The guidelines were chosen from a range of large cities in Canada and the US as well as for the state of Maryland and two general guidelines created by the Center for Urban Policy Research at Rutgers University and the Greenbelt Alliance, a Bay Area conservation and urban planning non-profit. The guidelines were found through internet research and chosen based on whether they were for medium to large scale infill development or were general residential guidelines for a large city or for general use by a range of municipality’s [A discussion of these policies can be found in Appendix B]. The diversity in sources for the standards, ranging from large to medium sized cities in the US and Canada as well as policy documents prepared by non-profits and university shows that a certain consensus has been built around specific design standards. This is then reiterated by the similarity between the design standards chosen.

Each guideline was reviewed and general goal, principals and objectives were placed on a matrix for each. This resulted in 18 general objectives [Figure 12] found in all eight infill guidelines. These range from
pedestrian connectivity, to eyes on the street. These guidelines were then used to evaluate new residential development on up-zoned lots in Community Board 1. Because of the range and diversity of guidelines chosen, this list represents generally agreed upon principles of good infill and high density residential design. Although it is difficult to use design guidelines to evaluate buildings as a group instead of individually, the characteristics that lead them to be grouped as a typology are also easily evaluated with the design guidelines. This is because the guidelines evaluate fairly general characteristics in terms of how the buildings integrate with their environment and not specific design details.
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<td>Architectural details with human scale</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>X</td>
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<tr>
<td>Avoid monotonous walls/variety of interests</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Minimize prominence of parking</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Provide strong connection between main entrance and sidewalk</td>
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<td>X</td>
<td>X</td>
<td></td>
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<td></td>
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<td>Compatibility with neighborhood context</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>Minimize privacy impact</td>
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<td>X</td>
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<tr>
<td>Provide eyes on street</td>
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<td></td>
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<td>X</td>
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<td>Provide usable open space</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<td>Incorporate green design features</td>
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<td>X</td>
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<tr>
<td>Harmonious relationship to topography</td>
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<td></td>
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<td></td>
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<td>X</td>
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<tr>
<td>Ground floor mixed/active use</td>
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<td></td>
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<td>Foster pedestrian linkages</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td>X</td>
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<tr>
<td>Enhance sidewalk</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>X</td>
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<td>Flexible design</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>X</td>
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<tr>
<td>Preserve nature</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td>X</td>
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<tr>
<td>Streetwall/unified streetscape</td>
<td>X</td>
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<td>X</td>
<td>X</td>
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<td>X</td>
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<td>Does not block sun</td>
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<td></td>
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<td></td>
<td>X</td>
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<td>X</td>
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Summary of the Results
Citywide Effects of the Rezoning

Since 2001, 1,676 buildings containing 29,806 units have been built on rezoned or up-zoned land [Figure 13]. Brooklyn had 12,118 units, the most of any borough representing 40% of all units built. Manhattan had the second most units with 9,734. Queens and the Bronx produced the third and fourth most units. Staten Island had only a very small area rezoned and produced the smallest number of units [Figure 14].

The Community Boards with the most new units on up-zoned lots are spread throughout the city. Community Board 4 in Manhattan had the most new units at 5,333 in only 26 new buildings. This district is comprised of the neighborhoods of Chelsea and Hells Kitchen on the west side of Manhattan. Both of these areas have experienced substantial rezonings. In 2005 the area around the Highline was rezoned to accommodate new residential and mixed use development. This rezoning has produced many large, new residential buildings. Community Board 1 in Brooklyn had the second most units and the most buildings with 5,149 units in 130 new buildings. This area is comprised of the neighborhoods of Williamsburg and Greenpoint. Community Board 2 containing downtown Brooklyn had the third most units. This area was rezoned in 2004 to allow increased residential and commercial development in downtown Brooklyn. The DUMBO neighborhood, also in this Community Board district, was rezoned in 2009 from manufacturing to allow a mixed of uses including residential. The fourth most units were produced in Manhattan Community Board 11 in East Harlem. This area was rezoned in 2003 to accommodate larger buildings. The fifth most development occurred in Community Board 2 in Queens containing Long Island City. This area has become one of the symbols of the rezoning policy due to the large amount of residential development in the Hunters Point South area.

The housing built on upzoned land made up only 10% of the 232,065 units built between 2001 and 2011 in New York City. However, the bulk of the rezoning took place after 2005 with some substantial rezoning, such as in Bedford-Stuyvesant taking place as recently as 2012. Housing production sharply declined after 2008 going from an average of over 26,000 units being produced a year between 2001 and 2008 to 7,240 between 2009 and 2011. It might take several more years for the full effect of the rezoning to be realized as the real estate market picks up and as additional areas such as East Midtown are rezoned. If housing production were to return to its pre-recession levels the rezoned areas of the city could experience substantial growth.

Study Area

Community Board 1 was chosen as the study area [Figures 15]. Although this neighborhood did not receive the most new units, it is as a good proxy for the rezoning policy. The rezoning of this neighborhood introduced an entirely new built character. The transformation of this area from industry to residential and from low rise houses and manufacturing to high density development is a good proxy for the overall goals of the rezoning and PlaNYC. Furthermore, this area has experienced three separate rezonings and has a substantial amount of new development. For these reasons, the neighborhoods of Greenpoint and Williamsburg were seen as a good case study to test what the effects of the rezoning have been on this neighborhood and what they possibly hold for other neighborhoods throughout the city.

As expected, the new buildings that have resulted from the rezoning in Community Board 1 are much
Figure 13
<table>
<thead>
<tr>
<th>Community Board</th>
<th>Units</th>
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<tbody>
<tr>
<td>Brooklyn</td>
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<td></td>
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<td>Staten Island</td>
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<td></td>
</tr>
<tr>
<td>Queens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5,149</td>
<td>130</td>
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<tr>
<td>2</td>
<td>4,227</td>
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<td>3</td>
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<td>6</td>
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<td>18</td>
<td>124</td>
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**Total**: 12,118 421 9,743 93 2,719 172 192 191 5,226 959

Figure 14
Up-Zoning and New Residential Construction
Williamsburg and Greenpoint  2001-2010

Figure 15
larger than the existing buildings of small apartment houses and row homes in most of the districts with an area of larger tenements in central Williamsburg. On average, the upzoned structures are twice as tall as the original buildings and have over four times as many units. The 2009 rezoning resulted in three existing residential buildings on main avenues being demolished to make way for new construction. These structures were built between 1899 and 1931 and included two single family homes and one 4 unit apartment building containing a total of 6 units. They were replaced by new buildings containing a total 18 units.

My analysis of new construction in Community Board 1 determined that seven distinct typologies have emerged from the rezoning in that district: high-rises, perimeter buildings, towers, box buildings, row buildings, lot buildings, and Hasidic buildings. These typologies were grouped based on building size, unit size, height, and general form [Figure 16]. Many of the typologies correspond to specific zoning districts. When evaluated based on design guidelines, each building type performs differently.
The high-rise towers built along the Williamsburg Waterfront have become the symbol of the Bloomberg rezoning program. These buildings are not only found along the waterfront but in the interior of the neighborhood. A very visible concentration is along Bayard Street at the southern end of McCarren Park [Figure 17]. One can be found in a low-rise neighborhood at the intersection of Ainslie and Keap Street [Figure 18]. However the largest and most visible of the high-rises is along the Williamsburg Waterfront.

The high-rise is the largest typology measured by height, size and units by a substantial amount. On average the structures have 20 floors; the next closest building category has 8.5 floors on average. The buildings have 127 units on average, which is 32 units more than the average of the next closest building. In 2 Northside Piers along the waterfront the units on average are very large: 5% are less than 500 feet; 58% are between 500 and 1000 square feet; 23% are between 1000 and 1500 square feet; and 14% are above 1500 square feet. These buildings are in a number of zoning districts with two in R8, three in R7, and two in R6.

The high-rises built in the high density waterfront zone look almost identical to what was specified in the Williamsburg rezoning guidelines. This area is blended R6/R8 zone. The R6 districts front the lower rise neighborhood to the east and buffer the taller towers created by the R8 district next to the river. Developers can use the R6 portion for affordable housing, which can then be transferred into a density bonus to build taller buildings in the more lucrative riverfront R8 zone. Because of the inclusionary housing bonus, high-rise buildings are on average 1.5 over the maximum FAR.

Three developments have resulted from these blended districts. Northside Piers is a development consisting of two, 30-story towers between North 4th and 5th Street. These buildings are wrapped by a 6-story affordable housing component called 20 North Fifth. The glass and steel high rises contrast sharply with the brick veneer of the low rise dwellings. A similar relationship has developed across the street. The market-rate Edge is also a 30 story high rise and the Edge Community Apartments forms a 6-story brick clad podium around the larger tower. Although developed by the same developer at the same time, the market rate and affordable buildings have separate entrances and residents of the affordable units are not allowed access to the amenities of the neighboring towers.

Intensive development has also produced a “wall” of high rise buildings in the R6A zone on Bayard Street next to McCarren Park. These three buildings range from 13 to 16 stories which is much higher than the six to seven stories anticipated by the rezoning. All three of these buildings were designed by the architect Karl Fisher, who has built eight structures on rezoned land in Williamsburg.

The waterfront high-rises perform well on the design guideline checklist. They enhance the pedestrian environment through street furniture and landscaping and ground floor active uses. The buildings also respond to topography, restore natural areas, and provide open space through the open space they have created along the river. The Edge development is staggered to create a landscaped plaza area facing and the building further connects with this area via a retail space. The plaza is already a popular place for visitors and residents due to the spectacular views of the Manhattan skyline and the river. It also home to a popular food market and flea

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The waterfront buildings are less successful on their backside facing the neighborhood. The affordable housing was placed along Kent Avenue and there is very little variation in terms of the façade or massing of the buildings. The result is monotonous 6-story street wall. This effectively cuts off any permeability between the water and the neighborhood, one of the goals of the rezoning. From Kent Avenue (a block in from the water) it is difficult to see the river [Figure 20] and there is little indication of the plaza and open space that lie on the other side of the block.

The relative success of the waterfront high-rises as compared to other new development in the area can be attributed to the extra design scrutiny it received from the City Planning Department. The waterfront high-rises look almost exactly like the diagram in the inclusionary housing program [Figure 21]. This is an example of a zoning district being very prescriptive in terms of building form. The zoning plan as well as the 197-a plan also provided a vision for how the river was to be developed in terms of open space. The extra scrutiny of development in this area by both the city and community has successfully achieved the goals envisioned for this area.

The high-rises near the park do not perform as well in terms of design. All three of these buildings have been built on a single block along Bayard Street between Union Avenue and Lorimer Street. These structures are highly visible, facing out onto a busy sports field and swimming pool in McCarren Park. None of these buildings engage the street through active uses or articulated facades. The Icon presents a long monotonous wall to the street [Figure 22]. 20 Bayard has an oversized entrance composed of an elaborate system of stairways [Figure 23]. This area is actually an appropriate place for density and fits within a New York tradition of locating large apartments next to parks. However, these building do not respond in an appropriate way to their prominent site. They fail almost every single guideline on the design matrix. If as much scrutiny had been paid to these buildings as was paid to the waterfront high-rises it could have produced a new community node next to the park. Instead, it has resulted in a block long dead zone.
Perimeter Buildings

The goal of this contextual zone was to create buildings that mimic the architecture of the old industrial buildings. It has succeeded in producing very large, squat buildings which have proliferated throughout the zone. These structures predominate in the former industrial portion of the neighborhood between the East River, South 1st, the Brooklyn Queens Expressway, and North 12th. These structures are called perimeter buildings because they often stretch the length of one or several blocks and often have courtyards in the interior.

Perimeter buildings on average have the largest lot size and the second largest building area. Their average height is seven stories and the average number of units in each building is 95. All of these buildings are in the R6A zoning district except for three adjacent ones which are in the R6 district. Perimeter buildings show great diversity in the size of units. For example, out of the seven units at 53 Java Street four are 600 square feet, one is 777 square feet, one is 910 square feet and one is 1,318 square feet.

The perimeter buildings also suffer from a lack of engagement with the street. The monotonous facades do not provide a variety of interests and are not at a human scale. Only 6 out of the 20 buildings of this type have retail. The deadening effect on the street scape caused by these buildings is compounded by their length. Many of these buildings resemble a sideways Manhattan skyscraper. On average these buildings have a lot front of 152 Feet. Half of these building would be prohibited under Edmonton’s design guidelines for large infill which do not allow buildings longer than 150 feet.\textsuperscript{87}

34 Berry is an example of the poor design qualities of these structures. This building has no retail and presents an unarticulated facade to the sidewalk which effectively deadens a half block of street frontage in the center of Williamsburg which should be a very active area [Figure 24]. This is out of keeping with the typical urban design of New York streets which is marked by many small buildings that add a high degree of variation and activity. Features like storefronts and the pattern of doorways and stoops from the many small buildings along a street were espoused by Jane Jacobs because they add vibrancy and visual interest for pedestrians.

Added design scrutiny could avoid the proliferation of these types of buildings in such a concentrated area. Perhaps the problem lies in the zoning district in tandem with the types of development sites available in the area for producing these buildings. The area where these perimeter buildings are being constructed is the hub of Williamsburg and an increasingly popular destination for people throughout the city as well as tourists. Perimeter buildings subtract from the nascent identity of this area as an activity center through their lack of engagement with the street.

\textsuperscript{87} Department of Urban Planning and Design. “Large Scale Infill Design Guidelines.” City of Edmonton, 2009, pg 2.
Towers

Towers constitute only four buildings built on up zoned lots. However, their distinctive characteristics and concentration in a particular area of the neighborhood have greatly impacted the urban environment. The name of these structures is derived from their small lot size and tall height. Of the four towers built in the neighborhood, all reside on two adjacent blocks near McCarren Park.

The tower form also has a direct connection to a zoning district. Several areas of Community Board 1 were rezoned to R6, which is the only non-contextual zone utilized in the Greenpoint-Williamsburg Rezoning. R6 districts allow a maximum of 2.2 FAR on narrow streets, or 2.43 if the Quality Housing option is used (contextual building types). On wider streets there is a 3.0 maximum FAR. Utilization of the Quality Housing option produces buildings similar to those produced under the R6A and R6B designations. If this option is not used it can produce buildings up to 14 stories tall on large lots, set back from the street. This zone was put in place where “height limits would be inappropriate, including areas characterized by tall buildings or a mix of heights.”

These areas are around the Brooklyn Queens Expressway and the Pulaski and Williamsburg Bridges. However, two triangular parcels next to McCarren Park were also rezoned to R6. This area is not near high buildings or infrastructure but older three and four story residential structures and is along a major shopping street. Ironically, the buildings on these two blocks, the only ones not near other high structures, are the only places zoned R6 where the Quality Housing option was not used.

Towers have the fourth smallest lot area and the second tallest height of all the building types identified. In spite, of this they are significantly under the allowed FAR at negative .75 on average. These structures have smaller units than other types. In the building at 297 Driggs Avenue, 14 of the units are less than 300 square feet with the rest being no bigger than 1000 square feet. These structures contrast with the older buildings surrounding them. They are all set back and have parking lots buffering them from the sidewalk. The area across the street from these buildings is zoned R6A and has produced two more contextual buildings one 4 stories and one 6 stories.

Tower buildings have the worst pedestrian connection of any of the building types. Whereas every other type is built to the lot line, which is customary in New York, towers are set back with parking lots buffering them [Figure 25]. Minimizing parking is found in six of the design guidelines in the matrix. The parking lots sully the pedestrian environment and do not continue a unified streetscape wall with the surrounding buildings. These buildings are also very much out of context with the surrounding structures, which are older three story buildings [Figure 26]. Compatibility with neighborhood context is found in every design guideline on the matrix. Towers are much taller than the surrounding buildings and their facades are more reminiscent of Miami or Vancouver, B.C. then the brick structures on adjacent blocks.

Like the perimeter buildings and high-rises next to McCarren Park, the poor design of Tower buildings are compounded by their prominent location. All of these structures are at the base of Manhattan Avenue which is Greenpoint’s main shopping street. This street is defined by many small stores and restaurants and is well populated with pedestrians at all times of the day. The area around these buildings is a particularly active part.
of the street because of several popular bars and restaurants. Rather than continue this active street life of Manhattan Avenue down passed McCarren Park, the tower structures are an abrupt break. They are set back from the street ruining the continuity of the street wall and are buffered by parking lots instead of retail. This is an example of new development benefiting from the activity of Manhattan Avenue and the park side location while giving nothing back in return.
Box Buildings

Box buildings are the most prolific form of new buildings in Community Board 1. These structures are mid-rise apartment buildings with box-like dimensions. They are most heavily concentrated in the former industrial area of the neighborhood near the Williamsburg waterfront. There is a large amount of variation in these structures in terms of their characteristics [Figure 32]. Some conform to odd lot sizes giving them hybrid characteristics, such as a building at 426 Keap which looks like a box along Powers street but is much narrower along Grand Street.

Box buildings are medium sized when compared to the other categories of buildings in number of units, floors, lot size, and building size. All but five of these buildings are in the mixed use 8 FAR zone and on average they are .8 FAR above the maximum allowed. There is a great deal of variation in the unit sizes of these buildings. For example the five units in 122 Newton Street are very large with four being 1,584 square feet and one being 2,196 square feet. However, out of the 18 units at 129 metropolitan Avenue: seven were under 200 square feet; eight were approximately 800 square feet; and three were over 1,000 square feet.

These structures perform well in terms of design guidelines. Their modest size blends in with surrounding buildings and they often have contextual designs. Nearly half contain retail. They also maintain a unified streetscape because they are built flush with the sidewalk. These structures integrate well into the neighborhood because they are extremely similar in size to the older, larger apartment buildings found in the area.
Row Buildings

The smallest building category is the row building, with only three structures demonstrating these characteristics [Figure 33]. Row buildings are mostly defined by being short, long structures, with multiple entrances. These buildings are not concentrated in one area but spread throughout the interior of the neighborhood.

Row buildings have an average height of three stories and have the second smallest lot size and building size. They contain the smallest average amount of units at five. These buildings predominate on the rezoned corridors from the 2009 rezoning and are all in R7 or R6 zones. These buildings fall well below the maximum FAR allowed at negative .8 FAR on average. There low density is perhaps why there are so few of this type of structure.

Row buildings perform well on the design guidelines. They are at a human scale and often are contextual with the neighborhood because their pattern of having many entrances mimics the older homes in the neighborhood. The building at 133 Roebling contains retail on the ground floor which activates the sidewalk. It also borrows design details of older brick warehouses in the neighborhood [Figure 27].
Lot Buildings

Lot buildings are the most dispersed of all the types of structures. This might be due to their small size with all occupying narrow, 25 foot lots. This makes this typology adaptable to many different contexts from residential to formerly industrial areas. Lot buildings have the smallest lot area and the second smallest building area. The average height is 4.5 stories and the buildings on average are under the allowed FAR by .2. Thirteen out of the 29 buildings in this category are in the R7A district. Fourteen are in the mixed use district and one is in the R6A district.

In Greenpoint, Manhattan Avenue the main commercial thoroughfare of the neighborhood was rezoned to R7A. However, this rezoning not only affected the lots directly on Manhattan but stretched into adjacent lots. This has allowed the tall skinny buildings to develop in-between traditional three story houses. These structures are often right next to the older neighborhood buildings and contrast with them both in scale and design. An example of this is at 150 Java Street where a six story building, clad in red brick with balconies extending out from the facade, sits next to traditional houses [Figure 28]. This has also happened at 216 Calyer Street where a seven story building with protruding balconies sits next to a three story house [Figure 29]. Both of these buildings were built by the developer Belvedere.

The lot buildings on the commercial street have slightly different characteristics than the ones on residential streets. These are typified by narrow 5 and 6 story buildings. The two structures at 628 and 630 Metropolitan give a good indication of the varying effects of this rezoning. Both are structurally similar with a building area of around 10,000 square feet and have retail on the ground floor. However, 630 is a modern grey brick building and 628 is built with a Mediterranean inspired aesthetic with pink brick, a gabled roof, and columns [Figure 30]. This is almost a comical juxtaposition illustrating the high variation in facades on extremely similar buildings.

Lot buildings do relatively poorly when measured by the design guidelines. Their small size lessens their impact in comparison with larger buildings. However, they are often several floors taller than surrounding buildings. They also tend to have architectural features that make them clash with the surrounding buildings such as the balconies on the Belvedere developed buildings. This disruption ruins the street wall and existing pattern along the street which diminishes the aesthetic cohesiveness of the block. Design standards could mitigate these buildings impact on the street by having them be flush with the sidewalk, have facades that replicate the patterns of adjacent building (as opposed to extruding balconies), and stagger extra floors in order to make them less obtrusive from the street. The buildings at 628 and 630 Metropolitan are an example of contrasting architectural details. This contrast diminishes the aesthetic identity and historic pattern of the street. However, the commercial lot buildings do have other positive features that meet the guidelines such as active uses.
Lot

1  2  3

4  5  6

7  8  9

58
Hasidic Buildings

The Broadway Triangle is one of the most controversial rezoning inciting charges of corruption, ethnic exclusion and a law suit. However, rather than these formerly industrial sites remaining vacant while the rezoning is redone, they have seen a large amount of construction. These resulting buildings have characteristics that cater to the Hasidic community.

All of the new Hasidic dwellings lie in the Broadway Triangle with the majority on one block bordered by Middleton St., Marcy Ave., Lorimer St. and Harrison Ave. This is the block rezoned by Walton Realty in 2012. The average height of these structures is 4.5 stories and the average building size is 12,603 square feet. However, the average amount of units in each building is only eight. The small ratio of units to building size is due to the fact that each unit is very large. In one building at 128 Middleton Street the average unit size was 2,228 Square feet with the smallest unit being 1,939 square feet and the largest unit being 2,543 square feet. These buildings have also taken great advantage of the density bonus with each building averaging .8 additional FAR over the maximum FAR for the zoning district. Almost all of these buildings are in an M1-2 districts with one being in an M3-1 and 2 being in R6-A.

Low heights and large units characterize Hasidic structures. Many critics who filed the lawsuit against the Broadway Triangle rezoning pointed out those short structures with many rooms cater to Hasidic Jews who have large families and cannot take elevators on Saturdays. These buildings also have very unique design characteristics. They often have pitched roofs, tan or red brick facades, raised entryways, and large, covered extruding balconies [Figure 38]. The large balconies are used to house outdoor structures during the holiday of Sukkot.  

The Hasidic dwellings do poorly when evaluated using the design guidelines. On many buildings they do not have a good connection because of oversized doorways with a large set of stairs in front of them. The large balconies and architectural details are not at a human scale. The fact that these buildings have been built on the same block creates a monotonous street scape. There is no retail in these structures even though they are adding a large amount of population to a once industrial area that has few nearby retail outlets.

The proliferation of these buildings in this area is the result of a lack of planning and New York’s permissive development laws. The complex ethnic dynamics in the Broadway Triangle as well as corruption scuttled a plan that would have conceivably made this a community for everyone. Instead, the ability of property owners to request zoning changes, and the acquiescence of government officials to grant them, led to this important site being built for only one community. The ethnically specific typological features and heavy concentration on several blocks of Hassidic buildings further segregates them from the surrounding community. Government officials should have insisted on a plan for this area before anything could be built. Instead, lax development oversight has resulted in another missed opportunity to create a new neighborhood for all residents on a prominent, undeveloped site.

Conclusion and Recommendation
This study did not investigate whether the typologies found on rezoned lots in Community Board 1 are typical of development in rezoned areas throughout the city. However, these buildings do tell us how the rezoning has impacted one area which may provide lessons for other rezoned areas. Since, the rezoned portions of Community Board 1 are still well below their full build-out potential, they also give insight into how future development in the neighborhood will look. One thing that is clear is that zoning has a very powerful influence on the form of new development. Whether it is the towers resulting from the R6 zone or the high-rises resulting from the R8 zone, developers have found profitable forms of buildings that they are replicating.

The rezoning in Williamsburg relied on contextual zoning to create buildings appropriately designed for the area. This zoning may be adequate to provide well-designed development in already built out areas. However, in places like Community Board 1, where the rezoning is essentially making new high density neighborhoods form the bottom up, it is clear that further guidelines are needed to make the redevelopment of these areas successful. Contextual zoning only makes sense when the context is something that should be emulated. In the case of the Williamsburg waterfront, there was no real context for the high density housing that the zoning permitted. The result is buildings that do not respond to their environment but respond to profit motives and efficiency ratios.

By and large most of the buildings that have resulted from the rezoning in Community Board 1 do not meet the criteria of positive infill development. The ones that perform best tend to have had more planning and design direction from the city. For example the waterfront area had an extra Land Use and Waterfront Plan which contained design principals. The entire New York City waterfront also had a plan called Vision 2020 which outlined principles for how the waterfront should be developed. Because of this extra oversight, development along the waterfront is more thoughtfully integrated into its environment in terms of open space and urban design. These parcels also tend to be larger and produce much larger buildings which allow the city to require extra concessions from developers, like affordable housing, certain design qualities, and open space.

However, the cumulative impact of smaller buildings on the urban fabric of the interior of the neighborhood will be much greater than the waterfront high-rises. These buildings are as of right and have no limitations on design other than the zoning code. The result is buildings that bring density but little else. Instead of creating vibrant new urban nodes, they have created dead zones such as the high-rises around McCarren Park or the Perimeter buildings in central Williamsburg. Instead of respecting the built patterns and contexts of their locations, they often contrast in negative ways such as the parking lots in front of the tower buildings or the balconies on the lot buildings. These examples show that another level of planning is needed for development in upzoned areas. It is needed not only to create buildings that respect the existing built patterns but create new districts that enhance the city. Places that build on the existing infrastructure and fabric to create new urban nodes that serve existing residents and visitors. The waterfront plaza in front of the high-rises along the river has achieved this, but they are also opportunities to replicate this elsewhere in the neighborhood. These are opportunities that should not be squandered.

Several new policies for that city government are recommended that will result in more thoughtful development in up-zoned areas. Not all of these tools need to be implemented. Rather, they are a menu of potential new regulations that can be imposed on the area. These are tools used in many other cities in the US and Canada, some of which are considered planning leaders. The three new policies are; community plans,
design review, and an infill housing toolkit.

The three tools will help up-zoned areas grow into cohesive, well-designed neighborhoods. They will benefit developers by creating more thoughtfully designed areas that should help stabilize long-term property values as well as benefit residents both inside and outside rezoned areas.

Community Plans

The Department of City Planning should create community plans for upzoned neighborhoods to guide growth and services as the neighborhood develops. Community Plans are a way to guide growth and investment in a neighborhood or defined area over a multi-decade period. These plans apply to a specific neighborhood or region of a city. California mandates General Plans for every city and county in the state. These plans must have seven elements including land use, circulation, noise, safety, open space, conservation, and housing. Larger cities, such as Los Angeles, have community plans for each neighborhood in the city. These community planning areas in Los Angeles are similar in size to Community Boards with each having around 200,000 people.

Community Plans are ways to guide growth in a neighborhood over a long period of time. They are also a way to collaboratively create a vision among stakeholders in a neighborhood. In the best community plans, this vision not only dictates where things should go, but how they should contribute to the neighborhood and create beneficial qualities desired by community members. Community plans also provide certainty for developers and residents because they know how the area will grow which reduces conflict about future development.

Community Plans could easily be integrated into the rezoning process. EIS’s are mandated for discretionary land use actions such as rezonings. These outline new infrastructure and amenities needed in areas to respond to the added growth. Instead of just being in the EIS these requirements could be integrated into a plan along with the rezoning. The rezoning by the city planning department should also be done as part of the 197-a plan. Currently rezonings are done separately leading to sometimes controversial differences between the two documents such as the decision to put high-rises along the Williamsburg waterfront. The rezoning plans in the 197-a plans they would also offer a more visionary component that outlines the goals residents and stakeholders have for their community.

Design Review

A design review process should be created by the City Planning Department or the Landmarks and Preservation Commission for upzoned neighborhoods. This is a process where new buildings in a designated area must abide by design standards and be approved by a commission before they can begin construction. New York could designate design overlay zones for rezoned areas. A design review board could be created for each area and proposals of a certain size or in certain important districts would have to be reviewed. This would ensure that new development meets the design goals of the community and has a positive impact on the neighborhood.

Design review is a way for the city and community members to review and give input on a building design.

91 Department of City Planning. “Community Plan Areas.” City of Los Angeles: http://cityplanning.lacity.org/complan/cpa/cpa.htm
before it constructed. This ensures that new construction is sensitive to the context of the area and fulfills the community’s aspirations for new development. This is not only a way to prevent poorly designed, out of scale buildings from entering a community, but to ensure that new development enhances the neighborhood.

Portland, Oregon designates design overlay zones where design review is required. These zones cover all of the central city and areas along the Willamette River where large amounts of high density development have taken place over the last two decades. “Design Review is used to ensure the conservation, enhancement, and continued vitality of the identified scenic, architectural, and cultural values of each design district or area and to promote quality development near transit facilities.” 93 Each design overlay zone has design guidelines, which prevents decisions on designs from being capricious. Developers have opportunities to get input on designs via a Design Advice Request. A design commission reviews proposals and either approves it or requests modifications.

New York City has also used design guidelines in several large scale redevelopment projects. In Battery Park City, design guidelines were used because it was thought that zoning was not enough to ensure development was appropriate for the area. The guidelines were inspired by other high density housing developments in Manhattan such as Tudor City, Central Park West, and Gramercy Park. The guidelines were for aesthetic reasons as well as financial ones because it was thought that aesthetically pleasing development would protect property values. “The guidelines set forth design and density controls that are not typically addressed by zoning. They establish a level of quality that sets precedent for future development, serves to enhance the value of property and protects the investment of each developer.” 94 Hunters Point South, a more recent development of approximately 5,000 new housing units in an up zoned area of the Queens waterfront, also uses design guidelines. These guidelines cover issues ranging from pedestrian facilities to incorporating high quality design. 95 In both of these cases, design guidelines were made possible because one authority had site control over the entire development site and was able to put conditions on how property was developed. This shows that in other large scale developments in the city, zoning is not seen as enough to produce well designed neighborhoods and that these regulations have not limited or stymied development.

**Infill Housing Toolkits**

Infill housing toolkits, such as those used in Portland or Edmonton, are ways to give developers and architects guidance on how to design buildings that provide positive contributions to neighborhoods. These toolkits give practical solutions to common development opportunity in a given city or neighborhood. These solutions show how to thoughtfully integrate new development into an area.

The issue of context or compatibility is important in Toolkits as well as in design review. Design guidelines need not be retrograde and deny architectural innovation. These do not have to be tools to “shrink-wrap” neighborhoods and limit growth and make new buildings historical knock-offs. Rather, compatibility “is not about replicating existing scale or reproducing the architectural styles of nearby buildings. Rather, the focus is on highlighting how higher-density infill development can be designed to respond to more basic neighborhood patterns, whose continuation allows change to be accommodated while preserving cherished aspects of

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neighborhoods character.”

In this respect design guidelines and toolkits can be a way to demand design excellence and innovation or to simply provide an easy road map for how new buildings can successfully be integrated into a neighborhood. The mechanisms of community plans, design review, and infill housing toolkits will provide a system to create new neighborhoods that embody the characteristics of the great districts of New York City. By offering clear guides for new development, these tools do not have to be onerous or a way to stymie development. Rather the tools will make development better and in turn make the city better.

The Legacy of the Rezoning

Over the last two decades New York City’s population has bounced back from a nearly 1,000,000 person deficit to be bigger than ever before and is projected to keep growing well into the next decade. This population growth is accompanied by rapid development. Districts near the central business area in upper Manhattan, Brooklyn, and Queens are virtually unrecognizable from decades before. In this context, creating new neighborhoods on prime waterfront land makes sense. Centering population growth in high density areas near transportation and jobs is both sustainable and fiscally smart for the city. However, what form this new development takes is important for the city’s long term viability and desirability.

In a lecture titled “What Good Can Architecture Do?” at the Graduate School of Design at Harvard, the Dean of the Ohio State School of Architecture Jeffry Kipnis said “If you need architecture to be a major practice, if you need it to be radically instrumental in the short term on specific problems it fails miserably.” The Bloomberg rezoning program has called for developers and architects to be radically instrumental in the short term in creating neighborhoods for a million new people. Planners, instead of being integrated into this process, were relegated to merely creating the building envelopes for these new structures.

In the past when New York was experiencing a crushing surge in population, the response of the development world was a tenement. This was a building that was designed to be as efficient as possible at housing the most amounts of people. This served the economy of the city by allowing workers to be close to their jobs. However, in terms of housing it created housing of almost un-paralleled human misery. This is because the developer response was to serve the market and not any other interest. On an urban level, solutions that only serve the market do a disservice to the public and often need to be retroactively fixed. In the case of the tenement this came in the form of a series of laws. However, these retroactive actions take decades to become effective. The problems of the tenements were not really solved until technological innovations, such as the subways, allowed density to de-concentrate.

Today’s rezoning area is meant to serve a new workforce moving into the city. This workforce is not low skilled immigrants but high skilled workers who need to be close to the financial and service firms of Manhattan instead of the docks and factories. Yet again market forces are triumphing over planning to create short-term solutions. This has resulted in much less dire consequences than tenements, but has sacrificed a valuable opportunity to get it right the first time and create dense neighborhoods that embody the qualities espoused by Glaeser and Chakrabarti. Planning was seen not as the key to creating these new areas, but an obstacle to

96 Infill Toolkit., Pg. ii.
producing as much development as possible. This type of thinking ignores the fact that while good development does produce enormous assets for cities, bad development creates an equal share of problems that can take decades to correct. Most successful new urban developments, from Battery Park City to the Pearl District have had intensive planning. The result is thoughtfully designed areas that will be long term assets attracting visitors and residents to the central city. Planning is the key to creating successful urban districts not the barrier. The development occurring in Community Board 1 may be attractive in the short term, but in the long terms there poor design might make them less desirable and underperform relative to better designed areas.

Using zoning as New York City’s primary planning tool is no longer adequate. Over the city’s history zoning has changed to respond to technological, real estate and demographic trends from the 1961 zoning revision to the creation of contextual zoning. The rezoning under Mayor Bloomberg is yet another evolution of the zoning as a tool for large scale master planning. However, this tool has proven to be a failure in creating well designed cohesive communities. New York is facing a dramatic increase in population which will most likely continue in the coming decades. Adapting the physical form of the city to adjust to this influx is essential. However, poor implementation in creating these new areas may threaten to undermine this process. The population is increasingly viewing this policy as a Trojan horse for gentrification and real estate interests as seen in Sunset Park and Chinatown. Now, while the city is on the cusp of having new leadership is the time to reevaluate these policies and its relationship with planning and see it not as a barrier but a key to creating new neighborhoods that will define the city’s future.
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Appendix A

Interview:
Justin Moore, Senior Urban Designer, NYC Department of Planning, Brooklyn Office.

Date: March 29, 2013

Questions:
What were the factors in choosing the community board district to be rezoned?

What was the community response?

What were the factors in choosing the lots within this community board district to be rezoned?

What were the factors in deciding what density to rezone lots?

Does the DCP give any guidance as to the design of new residential construction on rezoned lots within this community board district?

Has the amount of development that has occurred in the community board district on rezoned lots met expectations?

Is the DCP satisfied with the new development that has taken place on rezoned lots within this community board district?

Is the DCP contemplating any changes to the zoning in this community board district?
Appendix B

The “Infill Development Standards and Policy Guide” was prepared by the Center for Urban Policy Research at the Bloustein School of Planning and Policy at Rutgers University. This guide is meant as part of a larger smart growth strategy to focus development in established urban centers and lessen pressure for greenfield land to be developed. It is a general guide, written as a policy document, for cities and municipalities to adopt design standards for new infill development. The Bloustein School is considered a leader in Urban Planning and Policy education.1

The “Infill Design Toolkit” was created by the City of Portland Oregon Department of Planning Sustainability in 2008. It is meant as a resource for developers, builders, and community members to create medium density housing on small urban sites. The guide gives a variety of housing options for a variety of common sites found in the city.2

The “Smart Infill Guide” was created by the Greenbelt Alliance to help planners, citizens, and government officials, advocate and create policies for new infill housing.3 The Greenbelt Alliance is a non-profit organization that creates and advocates for policy’s to guide growth in the Bay Area. The Infill Guide is a distributed by the Association of Bay Area Governments which is the regional planning agency in the area.

The “Models and Guidelines for Infill Development” was created by the Maryland Department of Planning. The guide was meant to assist municipalities in the state in adapting to the Smart Code initiative. The guide discusses infill development and provides model zoning codes based off of best practices in other cities around the country.4

The Edmonton “Large Scale Infill Design Guidelines” is meant specifically for large scale urban development in key activity centers and large infill site. These guidelines are mandatory and give examples of new buildings should be designed to abide by the code.5

The “Los Angeles City Wide Design Guidelines” are meant to promote dense infill development which promote design excellence and maintain the neighborhood form and character. These guidelines are extremely detailed and provide details on how buildings should interact with the street, signage, facades, among many other things.6

The San Francisco “Residential Design Guidelines” are similar to the one in Los Angeles in that it is an incredibly comprehensive guide to how new infill development should respond to different urban conditions. This guide provides expectations for how new development should adapt to existing neighborhood character and is used to review plans for all new construction and renovation.7

The Seattle “Design Review Guidelines for Multifamily and Commercial Buildings” is a design guide for large residential and commercial buildings in urban areas. These guidelines area also used to evaluate proposals

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for new buildings.\textsuperscript{8}
