

UNPACKING MANHATTAN COMMUNITY DISTRICT 3

existing
conditions

LEEZA DISTEFANO,
JINGYI WU,
& SUNMOON JANG

MARIANA RICH,
VICTOR COACHMAN,
CHRISTOPHER RICE &
MELANIE TRUHN

ELANA BULMAN,
PAOLA DURAN &
JASON HERNANDEZ

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clients:  亞洲人平等會
Asian Americans for Equality


hester street
collaborative

MANHATTAN COMMUNITY DISTRICT 3

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Introduction

This report was commissioned by Hester Street Collaborative and Asian Americans for Equality, as part of a project to evaluate the options for adaptive reuse in three park buildings located in Manhattan Community District 3 (CD 3). It was researched and created by Pratt Institute's Spring 2013 Fundamentals in City and Regional Planning Class. In the interests of our clients, Asian Americans for Equality (AAFE) and Hester Street Collaborative, this report is on the existing conditions of Manhattan Community District 3 (CD 3) which encompasses: Alphabet City, East Village, Lower East Side, Chinatown and the Two Bridges. This existing conditions report focuses CD 3's current conditions with respect to demographics, existing community organizations, land use and zoning, open space, transportation and infrastructure, education, housing and the economy. The class also put together a brief overview of the area's history and current political representation.

1

1A History & Political Structure **1B** Social Infrastructure, Community Facilities & Organizations **1C** Citywide Context(Demographics)

LEEZA DISTEFANO,
JINGYI WU,
& SUNMOON JANG



HISTORY & POLITICAL STRUCTURE Historical Landscape, Immigrant City, Tenements & Settlements, Open Space & Community Garden Movement, and Political Structure

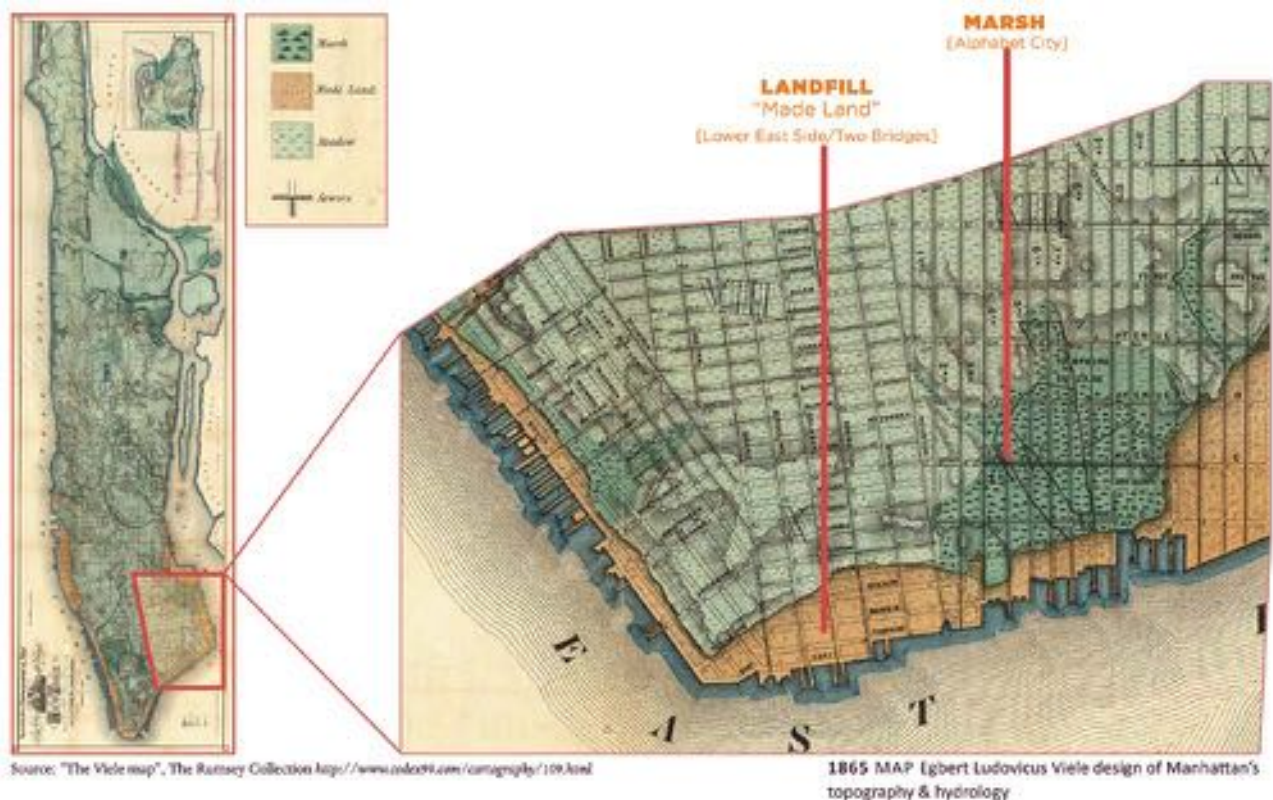
IMAGE: LOWER EAST SIDE 1940S

Chapter 1 History of the Area, Citywide Context, Residents and Community Facilities

1.1. History of the Area

This section covers the following topics: “Historical Landscape” as it relates to the topology of the community district; “The Immigrant Neighborhood,” discussing the waves of cultural immigration that influenced much of the community district as it is today; “Tenements Settlements,” discussing the history of tenement buildings, public housing, and social reform; “Open Space Movements,” briefly discussing the history of community gardens as it relates to the importance of our park structures; and finally, the political structure of the district with an overview of the current elected officials as well as those who are running for in the 2013 election.

1.1.1. Historical Landscape



Before 1776 and the American Revolutionary War -- when the nation was formed and before the Dutch had settled -- vast amounts of wildlife, plant life and open space one can be seen in the area we know today as Manhattan.¹ However, now, instead of snapping turtles and white-footed mice running around, we have an infestation of rats.

When discussing the historical context of this community district as it relates to Hurricane Sandy, it is necessary to highlight that a good majority of this areas including Alphabet City and Two Bridges are landfills. New York City's first public works project was a landfill created in 1803 to fill in what was known as Collect Pond.² The main reason, aside from commercial interest, to fill the pond was due to an outbreak of diphtheria, which was blamed on the water from Collect Pond.

1.1.2. "The Immigrant Neighborhood"

Manhattan Community District Three (CD 3) is comprised of five distinct neighborhoods (Alphabet City, East Village, Lower East Side, Chinatown and Two Bridges) and was predominately shaped by the population of immigrants who arrived to the Lower East Side beginning in the mid 1800's. Immigration first began in 1846 when the Irish were fleeing the Great Famine in Ireland. The Germans arrived the following year to in order to escape the aftermath of a revolution in Germany. The Germans began to settle in the area known as "Kleindeutschland" aka "Little Germany", which today we refer to as the East Village. There were both German Catholics and German Jews who began building churches and synagogues that have helped shaped the aesthetic of the area.

By the year 1870 there was another influx of immigrants that were fleeing wars in their home countries, including German Jews, Italians, Ukrainians, Poles, and Russians. More tenement buildings had to be created in order accommodate the growing population of immigrants. The era of tenement housing will be discussed in a section 1.1.3 of this report. Doctor Mindi Fullilove expressed how important it is for children to see the layers of history in our public spaces during a lecture on "Public Health, Emergency Response, Public Space: Looking for the Common Denominator".³ The Lower East Side houses a great historical resource in the Tenement Museum. Currently the Museum's youth programming has been successful in doing just that: revealing the layers of history of these spaces.

After World War II the low-middle to middle-class families had moved out of the Lower East Side and there was an influx of Hispanics moving into the neighborhood. The majority of the Hispanic population were Puerto Ricans and there was also a high number of Mexican-Americans. A majority of this population moved into the large government housing projects.⁴ "Loisaida" was the nickname coined by the Latino population for "Lower East Side". Consequently, there is a non-profit grassroots community based organization called Loisaida Inc. in the Lower East Side that emerged out of the 1970's to fight against drug and violence in the neighborhood. Loisaida, Inc.'s mission statement is to "facilitate access to education, training and employment opportunities that ensure the overall improvement and economic development of the community". The organization held a festival in May 27, 2012 to celebrate their 25th anniversary.⁵ Gentrification in the 21st century (growth of white population) has displaced a majority of the Hispanic population in the district and this has changed the aesthetic of the neighborhood.⁶

In recent years the Asian population has been growing substantially in CD 3, mostly as an overflow from Manhattan's Chinatown. Chinatown falls in between both CD 3 and Manhattan Community District Two. Our client, AAFE (Asian Americans for Equality) has been involved in advocacy work in Manhattan's Chinatown since 1974. Their work has been widely recognized in areas of preserving affordable housing, community development, and social services.⁷

1.1.3. Tenements Settlements



"Tenements" from Jacob Riis Photography.

Source: <http://qphenomenalnewyork.wordpress.com/tag/old-law-tenements/>

As stated in the section 1.1.2, tenement housing was primarily built to accommodate the influx of immigrants. There are roughly over 200,000 people living in CD 3 today; however, during the early 1900's there were over 550,000 people. One needs to understand that half of Manhattan's population was living in the Lower East Side alone during that time period.

Between 1845 and 1860 New York's population had doubled and tenement buildings were being poorly constructed due to a lack of regulation and in order to make the largest profit. There was no consideration for immigrant's health, comfort, or protection. Many organizations emerged from these circumstances in order to protect immigrant rights.

By 1867 New York finally passed a reform law known as the Tenement House Act. The law required basic sanitation and health regulations to be integrated for newly constructed tenements. However, this law was not enforced well enough to protect the rights of immigrants. In 1879 another series of laws were added and next wave of constructed buildings were known as the "dumbbell tenements". This was because the floor plan changed to resemble the shape of a dumbbell. Only 65% of a 25x100 square foot lot could be built on and the rest was required to be open space. The floor plan change did not stop the overcrowded

conditions, yet the Department of Health/Board of Health refrained from intervening. Social activists fought to have tenements demolished and the construction of the Williamsburg and Manhattan Bridges cleared out most of these slums. The location of today's Allen Street Malls was previously a skid row of slum housing.

Finally in 1929 another set of regulations were required for tenement construction. Unfortunately, due to the Great Depression landlords could not afford to make the appropriate upgrades to meet the new requirements. As a result many of these buildings were abandoned. Mayor Fiorello LaGuardia saw the abandoned buildings as an opportunity and worked with the federal government to create shelter for the poor, known today as "public housing". In 1934 the first locally built public houses were in the Lower East Side (3rd Street and Avenue A). The new public housing still had overcrowding issues and, as previously stated, post World War II Puerto Ricans and African Americans began moving into the public housing.⁸

Out of the tenement lifestyle grew a culture of strong and enduring communities. We can see that same social fabric as a result of Hurricane Sandy and the neighborhood coming together to help each other.⁹

The book, "Lower East Side: Oral Histories", a collection interviews by Nina Howes, captures much of the Lower East Side's spirit from the 1920s to the 1970s. Howes noticed a dramatic shift in the neighborhood that she had lived for the past 40 years and spent the last 40 years wanted tell the to get stories of the residents before they disappeared. In fact, in 2008 The National Trust for Historic Preservation placed the Lower East Side on their list of America's most endangered places. In 2007, Howes had been kicked out of her apartment when the building was sold to a European developer for \$4.5 million dollars. Her interviews are from people of several different ethnic backgrounds that represent the diversity of the neighborhood. Interviewees spoke about not having bathtubs in the early days and how it wasn't required to have a bathroom with a shower in the buildings. People had to take showers in public bathhouse and paid .25¢ or .50¢ to wash themselves. By knowing more about the living conditions it is surprising how rapidly disease spread during this time period.¹⁰

1.1.4. Open Space Community Garden Movement



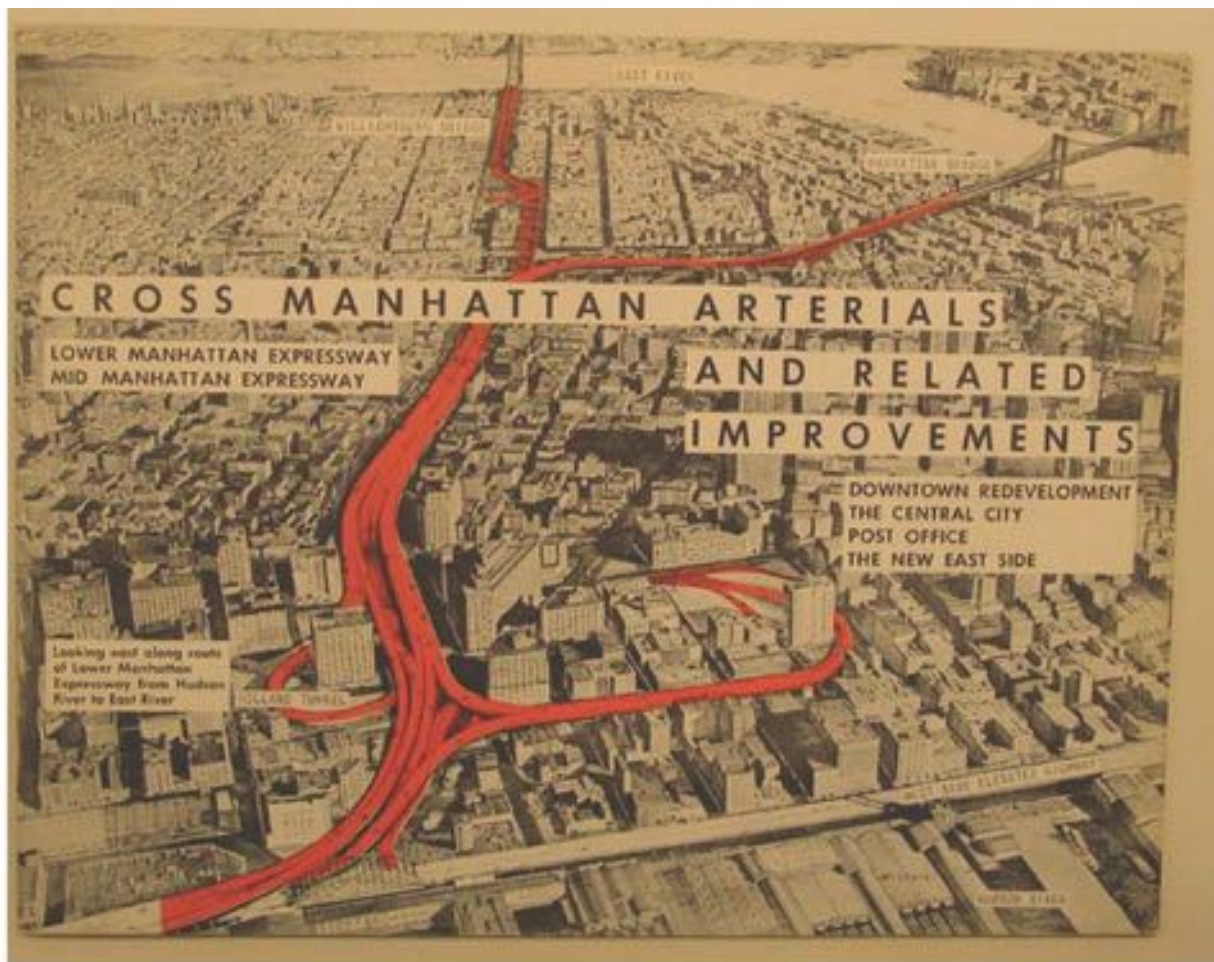
1975 image of Liz Christy in one of her Lower East Side gardens.
Courtesy of Donald Loggins

The historical events of CD 3 are what really shaped the existing conditions of the parks and their structures. Seward Park was one of the first Children’s Community Gardens when opened on October 17, 1903.¹¹ Sara D. Roosevelt was dedicated on September 14, 1934 and named after President Franklin Delano Roosevelt’s mother. The Stanton Building within the Sara D. Roosevelt Park is one of the buildings being consider for adaptive reuse in this project and was also mentioned in an article on the Lo-Down blog site as a good building to be used for the community.¹²

The administration of NYC Parks & Recreation ran by Robert Moses¹³ in the 1920s and 30s had been heavily dependent on the New Deal programs from the federal government. Parks, beaches, and playgrounds were built; however in a very top-down approach within planning. After the government dollars were spent the city quickly slipped into urban decay and grass-roots efforts were made to restore the city’s open spaces.¹⁴ The community garden movement began in the 1970s as a response to the City’s economic crisis and has its roots in the Lower East Side. There are over 20 community gardens in CD 3 alone and 75 community gardens through land trusts in four boroughs: Queens, Manhattan, Bronx, and Brooklyn.¹⁵

The organization 596Acres.org plays an important role in modern day community gardens. The organization was created to inform the public about city land that can be transformed into community open space. 596Acres.org started in Brooklyn and then made its way to Queens and Manhattan. Director and founder Paula Z. Segal used the website to orchestrate volunteers for Sandy relief efforts. It is interesting to see how a simple tool for organizing has led into building capacity in emergency response efforts. The reason this is emphasized in the open space and community garden movement is because the tools that are available today to make information easily accessible have the ability to rapidly create mobilization in the community.

1.1.5. Political Structure Elected Officials



1960s Renderings of the proposed Lower Manhattan Expressway

The date is December 7, 1962 and the final decision of building the Lower Manhattan Expressway had reached a startling halt due to a six-hour public hearing.¹⁶ How can one begin to imagine that we no longer have SoHo or the Lower East Side as part of our Manhattan neighborhoods? Another project of Robert Moses, proposed in 1941, was to have the Williamsburg Bridge and the Manhattan Bridge (both built in the early 1900s) connect with the Holland Tunnel. This essentially would have displaced 1,972 families that lived along the route along with 804 business establishments. The community's voice in this neighborhood was and is

still important in making sure projects similar to these are stopped before they are started.¹⁷ In order to ensure support by local, state and federal government it is important to also make familiarize with current leadership and their current focus with policies and interests as well as the candidates that are running for the 2013 election which will affect not only NYC as a whole, but also Manhattan Community District Three. See Appendix 1.1 Current elected officials.



SOCIAL INFRASTRUCTURE, COMMUNITY FACILITIES & ORGANIZATIONS

Education & Cultural, Public Health Services, Organizations and Public Safety

IMAGE: LEEZA DISTEFANO "HAMILTON REC CENTER"

1.2. Social Infrastructure, Community Facilities and Organization

This section introduces the distribution of community-based organizations, educational and cultural institutions, public health services and other major social infrastructure as well as community facilities in CD 3. Generally, community-based organizations, places of worship and museums are mainly distributed along the northwest area of the district. Schools, public housing, hospitals, and senior centers are located in the southeast quadrant (see map social facility and community infrastructure). Community based organizations and educational institution are vital to maintaining and promoting stable development. They participated main innovative projects in Lower East Side, such as People's Plan, Allen And Pile Street Pedestrian Malls Renovation, and etc.



Figure 1.2.1 Social Facilities and community infrastructure

1.2.1. Organizations

Non-profit Community Based Organizations

There are more than 50 non-profit community based organizations in CD 3¹⁸, and 28 of them play important roles for local residents (appendix a). There are eight organizations focused on providing assistance to people of all ages and the whole community; four serving the needs of seniors; three for youth and two for women. There are art organizations as well¹⁹(see map of organizations). The map also shows the different median household income levels by area. There are few organizations in the lowest areas near waterfront. Most organizations are in the central west of this district. In addition, the New York Department of Education provides numerous programs for teenagers, such as Out-School Time and Beacons. The community-based organizations provide equal opportunities of education, personal development of social welfare, sustainable development and.

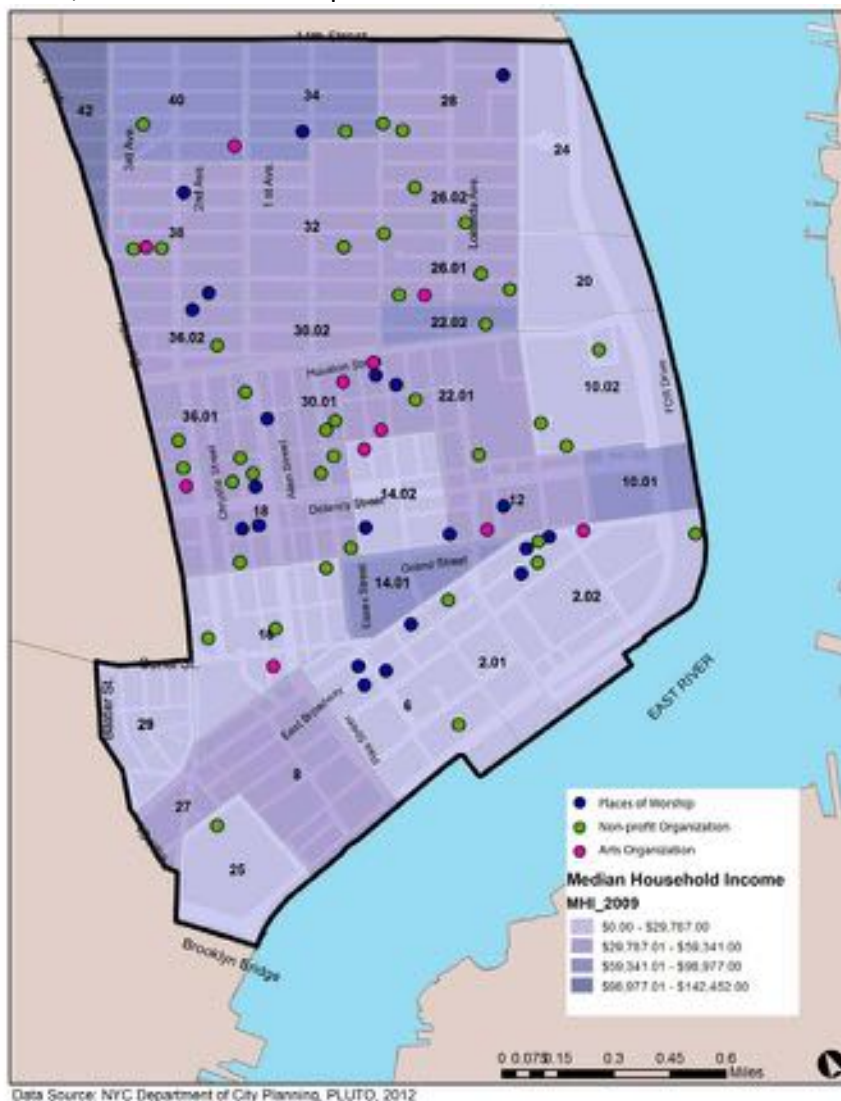


Figure 1.2.2 Organizations

To address the needs of the diverse immigrant population in CD 3, there are several organizations: seven Chinese, three Jewish and a few for Hispanics and Ukrainians, all located in the area. There are seven organizations for arts and culture, two for the environment, two for employee rights in CD 3. The programs and services provided by these organizations bring positive influences to the community.



Figure 1.2. 3 Asian Americans for Equality

The clients requesting this research, Asian Americans for Equality (AAFE, figure 1.2.3) and Hester Street Collaborative are both non-profit

organizations located in CD 3. AAFE is a non-profit

organization dedicated to enriching the lives of Asian Americans and all of those who are in need. AAFE is committed to preserving affordable housing throughout New York and to providing new opportunities for the city's diverse immigrant communities. Employing innovative approaches, the organization has preserved and developed 86 buildings, creating more than 700 units of housing.²⁰



Figure 1.2.4 Hester Street

Hester Street Collaborative (HSC, figure 1.2.4) was founded in 2002 by the architecture firm Leroy Street Studio (LSS). The East New York Urban Youth Corp, a nonprofit group specializing in building rehab and community outreach, approached LSS to work on an affordable housing project and community center. Today, HSC staff and LSS architects still work together on

community design projects, as well as design education efforts.²¹

Social Health Services

Although there are no major hospitals in CD 3, there are many medical institutions (see the map of social services) within the district. There are five nursing homes, hospital hospices and hospital inpatient units, 32 ambulatory facilities and programs and 23 chemical dependency treatment facilities. There are 36 mental health service facilities, eight of those for persons with developmental disabilities. There are also 73 daycares and residential facilities for children and 11 facilities for seniors. Gouverneur Hospital has four satellite clinics in the neighborhood, including diagnostic, clinic and healthcare services; three are located in Lower East Side and in the East Village. In addition the New York University Downtown Hospital, Cabrini Hospital, Beth Israel and Bellevue are nearby and serve CD 3 residents. There are 33 day care centers that provide preschool and child care. In terms of public cultural institutions and public health service facilities, all of them are small-scale and were widely distributed in this area. Generally, social facility structures are comparably outdated and dealing with on-going gentrification.

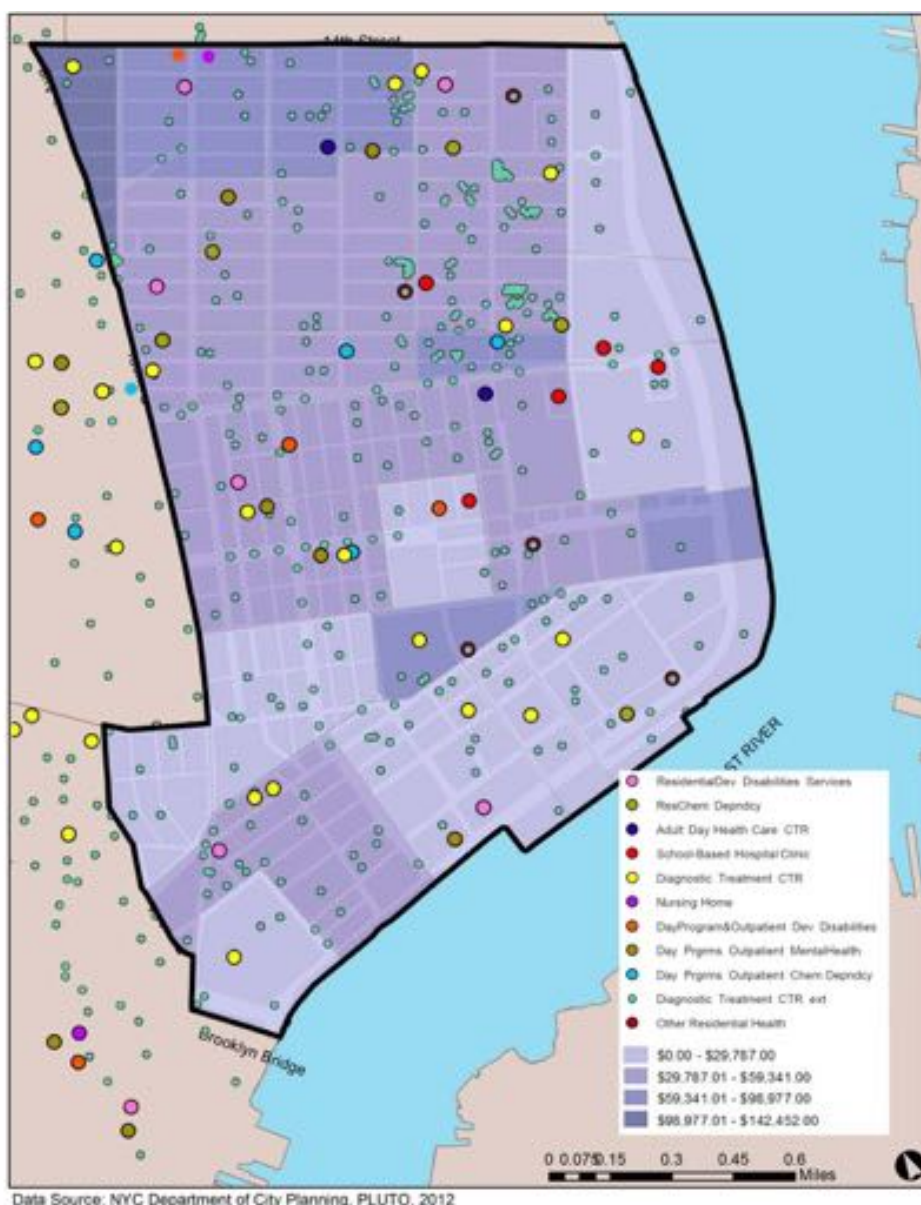


Figure 1.2.5 Social Healthy Services

1.2.2. Education and Cultural Institutions

Schools

There are a total of 46 public elementary and secondary schools, 14 private/parochial elementary and secondary schools, two elementary charter schools, one college and other post-secondary institutions in CD 3 (figure 1.2.6). There are 20,275 students enrolled in public

and charter schools and 2,304 in private schools. ²²Public schools are mainly concentrated in the Lower East Side and waterfront; private schools are predominately located in the East Village (see the map of schools). The amount of public schools far outnumber private school. According to a report by Department of Education, Asian and White children usually concentrate certain schools by ethnicity follows a certain pattern. While information and data are available for public schools, the same information is not always in not available for all private schools. Due to the density of immigrants, most schools provide multiple language classes, especially Hispanic and Chinese. There is only one college in CD 3, so the district doesn't attract higher educational people from other district, cities or counties.

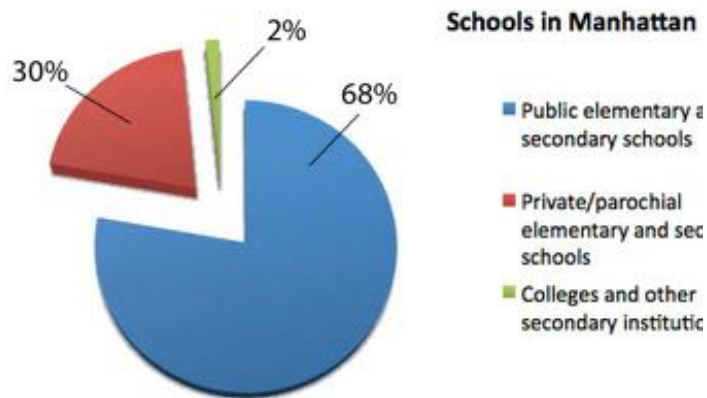


Figure 1.2.6
Source: U.S Department of Education, Manhattan Community District 3



Figure 1.2.7 Schools

Libraries

Community District Three has five branches of the New York Public Library (NYPL) system. Seward Park Library, New York Public Library, Tompkins Square Library, Ottendorfer Library, and Hamilton Fish Park Library (see the map of public libraries). All of them are small-scale, community libraries located near public parks or schools. According to a CD 3 report, these branches have the highest levels of use in the city. Yet they need more funding for maintenance and promotion of NYPL facilities in the district. The branch libraries open six days a week. Among the wealth of resources provided by the NYPL is free Internet access for library users, multiple linguistic programs and programs for teenagers, such as “One World, Many Stories’ Summer Reading Program”.

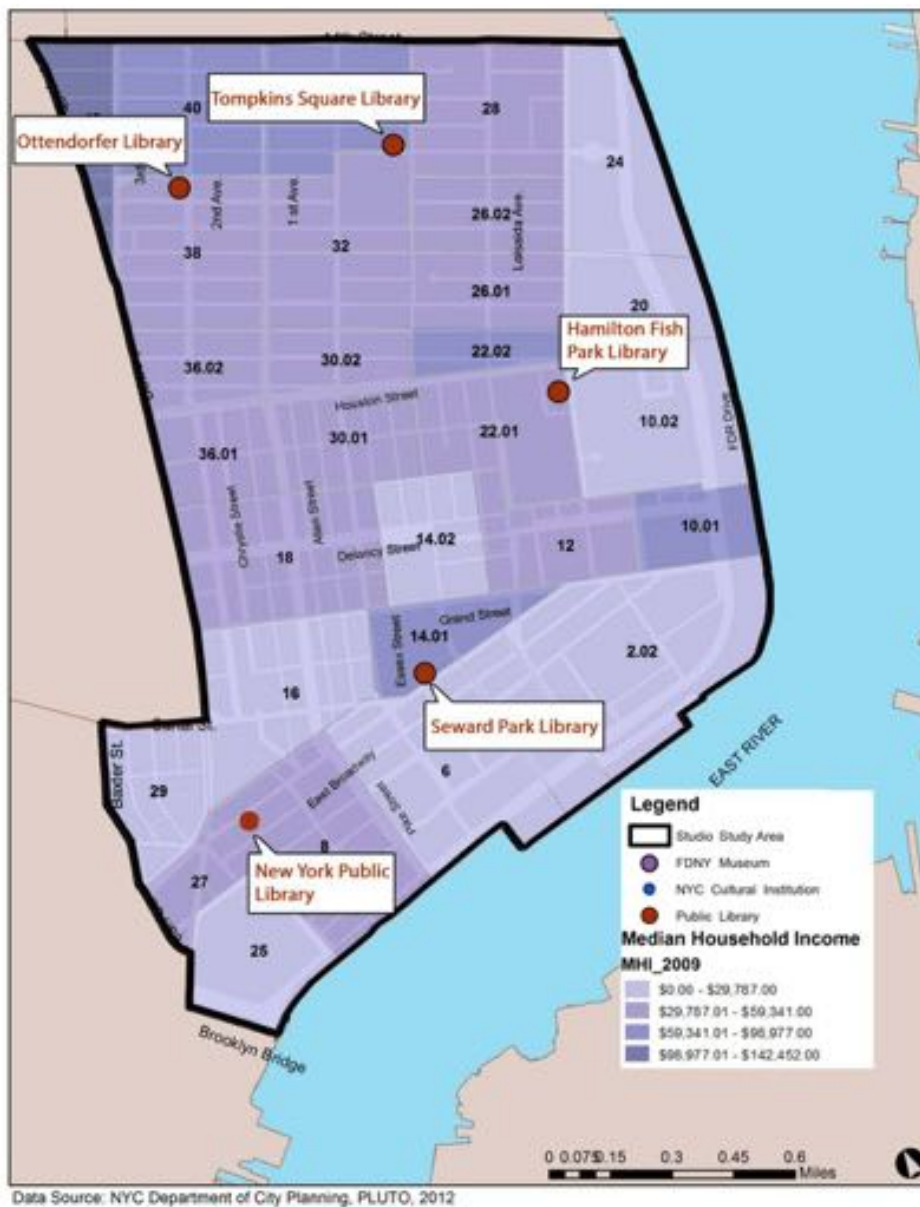


Figure 1.2.8 Libraries

Museums

There are two small-scale museums, the Lower East Side Tenement Museum (history, figure 1.2.9) and the New Museum, (contemporary art, figure 1.2.10) are located in CD 3. There are also some synagogues that open their special collections for visitors. All of them are located on the west side of the Lower East Side (see the map of public museums). They provide programs

for youth and family all year-round. In addition, in order to utilize art as an educational tool, there are some collaboration between art centers and local schools.

**NEW
235 BOWERY
NEW YORK NY
10002 USA
MUSEUM**

**TENEMENT
MUSEUM**

Figure 1.2.9

Figure 1.2.10

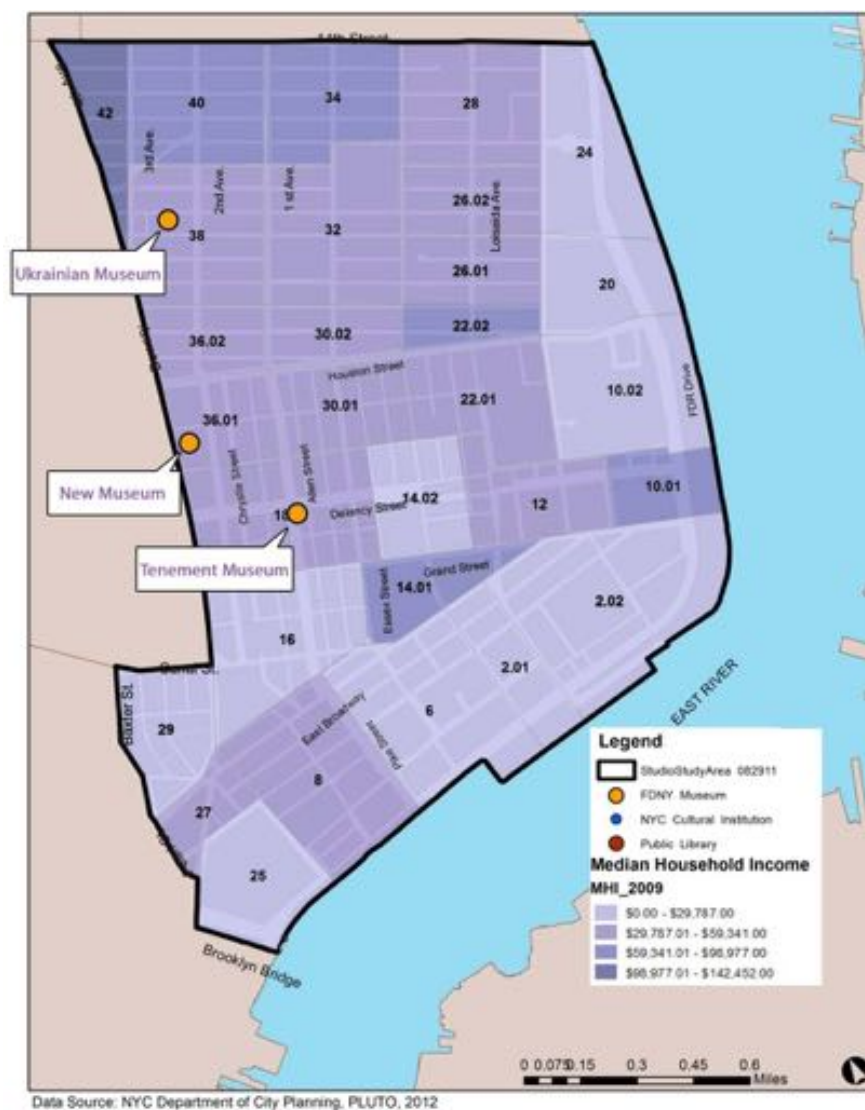


Figure 1.2.11 Museums

Galleries and Art Centers

The Lower East Side is an art incubator. There are plenty of galleries and art centers concentrated here. This area is also famous of street art. Kenny Scharf completed his mural Houston Street graffiti wall in 2010.²³

1.2.3. Public Health Service

Overall Health

Cancer, HIV-related disease, heart disease and drug -related issues are the top five health problems in this district (figure 1.2.12). It is worthwhile to note that alcohol consumption is gradually becoming a major problem in CD 3. There are areas in the district with a disproportionally high amount of alcohol-related hospitalization (figure 1.2.13). Due to pollution from heavy traffic asthma is increasing as well. However, a report from the Department of Health and Mental Hygiene, found that the rates of obesity and diabetes are comparably lower in CD 3.²⁴

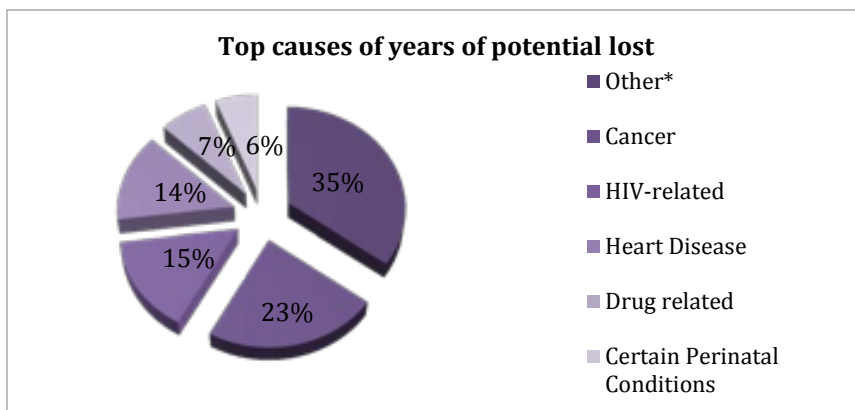


Figure 1.2.12 U.S Department of Health and Mental Hygiene, Community Healthy Profile Lower East Side

Alcohol-related

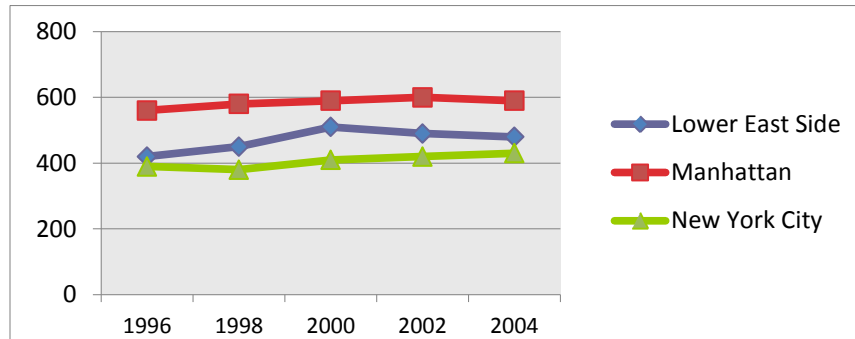


Figure 1.2.13 U.S Department of Health and Mental Hygiene, Community Healthy Profile Lower East Side

Mental Health

There is an on-going need to provide mental health services in response to the 9/11 terrorist attacks and Hurricane Sandy on New York City. Compared to other districts, the rate of psychological distress is higher than average in Manhattan²⁵ (figure 1.2.14). Some people with mental diseases become homeless.



Figure 1.2.14 U.S Department of Health and Mental Hygiene, Community Healthy Profile Lower East Side

1.2.4. Public Safety

Police Department

From a report of NYPD, the rate of crime dramatically decreased from 1990 to 2001, however, the rate slightly decreased from 2001-2012.²⁶ (figure 1.2.15) Community District Three are within the jurisdiction of three police precincts, the 5th, 7th and 9th, and one Public Service Area (see map of public safety).

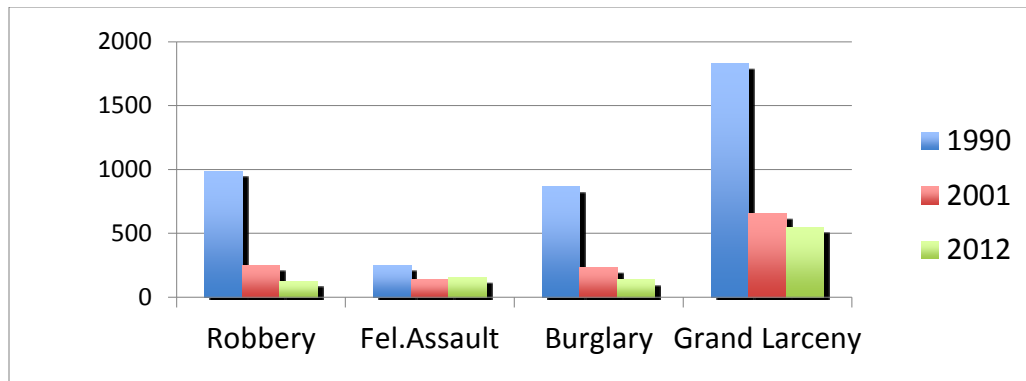


Figure 1.2.15 U.S New York Police Department



Figure 1.2.16 Public Safety

Fire Department

Community District Three has seven fire companies currently serving the needs of the district.



CITY WIDE CONTEXT | DEMOGRAPHICS Ethnicity, Household Composition,
Youth & Seniors, Vulnerable Population

IMAGE: CAAAV IMAGE OF SANDY VOLUNTEERING LES, NYC

1.3. Citywide Context

This section discusses the macro-level demographic changes within a citywide context over time in CD 3. It includes population change, ethnicity composition, age, education level, linguistic isolation, family forms, disabilities and economic status. Based majorly on the Census Data throughout 'CD3 today' compared to Manhattan and to ten years ago, this demographic research leads to conclusions of the strengths, weaknesses, opportunities as well as threats in the area.

1.3.1. Population Growth

	Total Population		Change (%)
	2000	2010	
New York City	8,008,278	8,175,133	2.1
Bronx	1,332,650	1,385,108	3.9
Brooklyn	2,465,326	2,504,700	1.6
Manhattan	1,537,195	1,585,873	3.2
Queens	2,229,379	2,230,722	0.1
Staten Island	443,726	468,730	5.6




Figure 1.3.1 – Manhattan CD3 Profile from US Census Bureau

According to the 2010 Census Demographic Profile²⁷ out of the 8,175,133 people that comprise the population of New York City, 19.4% (1,585,873) are located in Manhattan Borough whereas 30.6% (2,504,700) in Brooklyn, 27.3% (2,230,722) in Queens, 16.9% (1,385,108) in the Bronx and 5.7% (468,730) in Staten Island. Out of the 19.4% in Manhattan, 10.3% (163,277) are living in CD3. This number shows a slight decrease in CD3's population, which changed by -1.7% from 2000 (164,407). (See Figure 1.3.1)

The one-year gain of nearly 60,000 people²⁸, from July 1, 2010, to July 1, 2011, was higher than most annual estimates in the 2000s, and higher than the average annual increase of about 17,000 in the previous decade, comparing the 2000 and 2010 censuses. In every borough, more people left for other parts of the country than moved in, and a similar pattern was recorded in the counties that surround New York City. The Bronx recorded the biggest loss through migration (more people leaving than moving in) over all. Manhattan was the only borough that

showed a gain from combined domestic and international migration. The overall population increase was due largely to higher birthrates. Overall, the population of the New York metropolitan area increased by nearly 119,000 people from 2010 to 2011. The area ranked fourth in gains nationally, behind Dallas, Houston and Washington, and ahead of Los Angeles and Miami. Based upon the new estimates, it appears that New York City has returned to quite robust growth,” said Andrew A. Beveridge, a sociologist at Queens College. “The demographic effects of the financial crisis may be starting to wane.”

1.3.2. Ethnicity

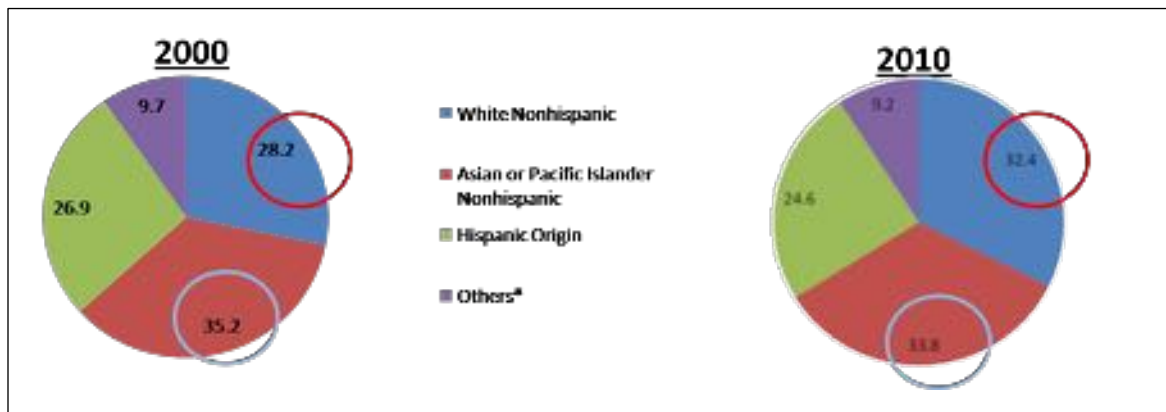


Figure 1.3.2 - 2007-2011 American Community Survey 5-Year Estimates (DP-02), US Census Bureau 2011

While the population of Hispanic origin has decreased to 24.6% from 26.9% (44,195) in 2000, the White Non Hispanic population has increased to 32.4%, which seems significant against 28.2% decade ago, in 2000. However, CD 3 still remains diverse, despite 14% (6,502) increase in the White population. (See Figure 1.3.2)

There is a higher percent of foreign-born population in CD3 (36%, 59,864) compared to Manhattan (29%) and NYC (34%). People of color comprise 67% (111,179) of CD3. In regard to each ethnicity, the Asian population is highly concentrated in census tracts (CT) 6,8,16,18,27 and 29 (Chinatown and Two Bridges). The Latino population is highly concentrated in CT 10.02, 20, 24 (along the East River, north of Williamsburg Bridge). The white population is highly concentrated in CT 32, 34, 38, 40 and 10.01, 14.01 (the western part of East Village, in Seward Park and along the eastern portion of Delancey).

Figure 1.3.3 – CD3 Map



The passage of the 1965 Immigration and Nationality Amendments led to a surge in immigration to New York City and a decline in the share of European immigrants. Between 1970 and 2000, the total foreign-born population nearly doubled, from 1.44 million to 2.87 million, while the share of Europeans dropped, from 64 % to 19 %. Latin America was the largest area of origin in 2000, accounting for nearly 32% of the city's foreign-born, followed by Asia (24%), the non-Hispanic Caribbean (21%), Europe (19%), and Africa (3%).²⁹

From the vast ethnic diversity in CD 3 comes as equally vast cultural diversity. There are several ethnic and cultural festivals held each year in CD 3, such as Chinese's New Years, San

Gennaro, Annual Greek Festival, The River to River and Ideas City, etc.

1.3.3. Age, Gender, and Family Form

In terms of age, CD3 is growing older compared to a decade ago. The population over 65 years slightly increased from 13.4% to 14.4%. On the other hand, the population under 19 years decreased by 2% from 15.8% in 2000 to 13.3% in 2010. The youth population is concentrated in

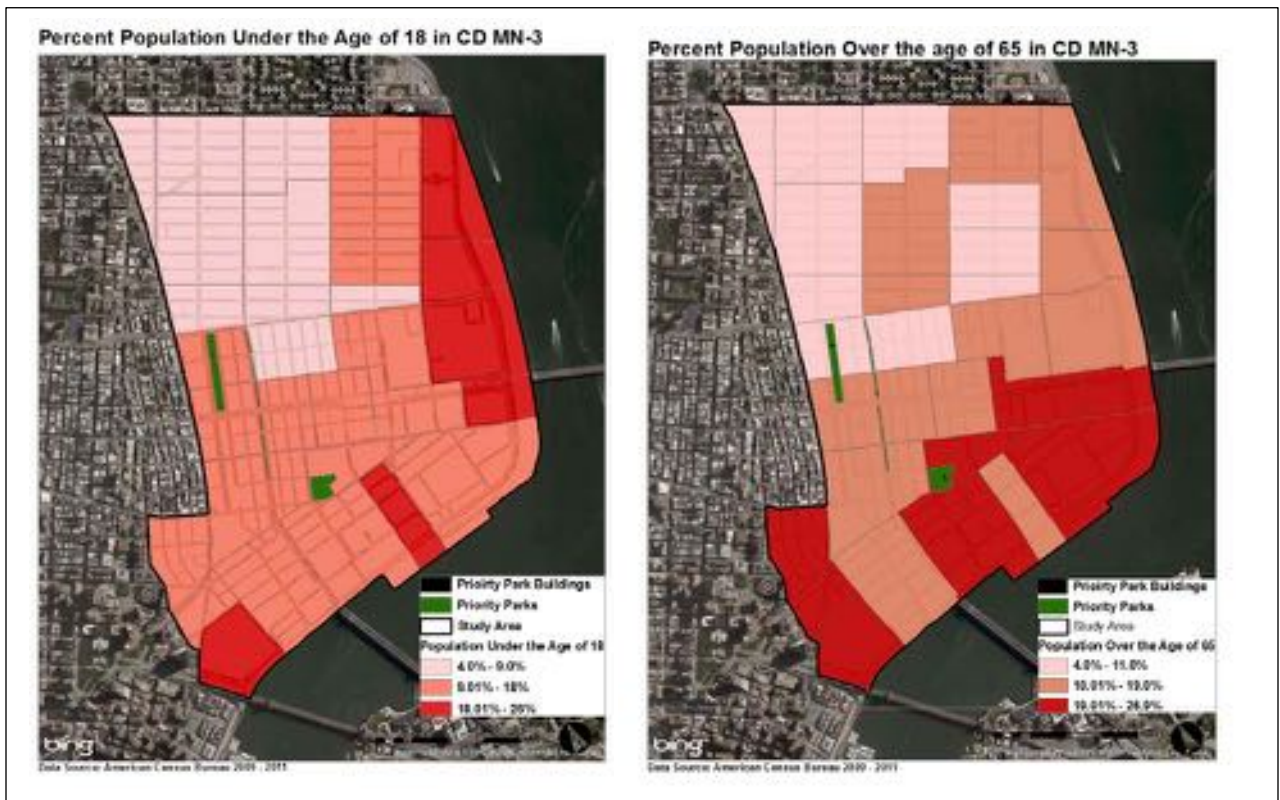


Figure 1.3.4 – US Census Bureau

CT 10.02, 20, 24, and 42. These areas are also where the majority of the Hispanic population is located and are mainly on public housing sites along the waterfront. Seniors are highly concentrated along the southeaster waterfront and parts of Chinatown. As referenced earlier on Map X Social Service, there are a small number of senior centers in the senior-concentrated waterfront area (CTs 24, 20, 10.02, etc.). (See Figure 1.3.4)

In addition to age, genders are less unequal than a decade before. Currently, males make up 47.6% of the total population and female make up 52.4%. In 2000, it was 49.3% versus 50.7%, respectively. This type of gender distribution appears to be an overall trend in NYC as seen in Manhattan (Male 46.9% vs. Female 53.1%) and Brooklyn (47.2% vs. 52.8%).



Figure 1.3.5

1.3.5)

The family composition in CD3 varies from that in the greater Manhattan. The single parent ratio in CD 3 is higher than the average in Manhattan. The female householder with no husband in CD3 is 14.3% and 11.9% in Manhattan. Single parent households in CD3 are concentrated on CT 2.02, 10.02, 18, 24. Also, CT 10.02 has the highest concentration of single parent household with children. Census tract 10.02 is located on the waterfront; so single parent households with children are potentially more vulnerable to respond to emergency situation. (See Figure

1.3.4. Economic Status

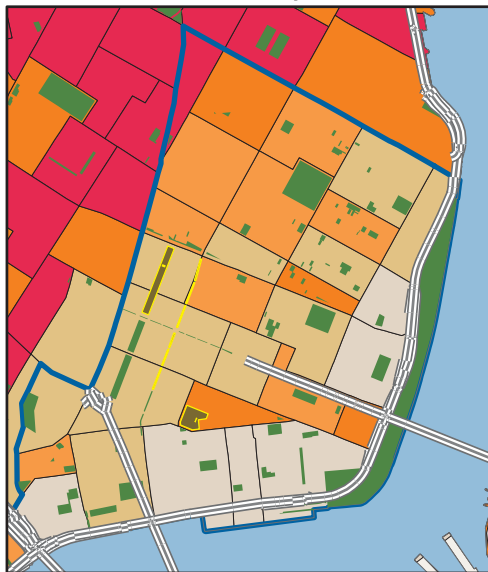
The median household income in Chinatown is \$25,457 and \$63,706 in Manhattan. Community District Three's median household income is \$43,518, much lower than that in Manhattan.^{30 31} The lowest income populations are located in CT 10.02, 20, 24, 2.01, 6 and 26, along waterfront areas. The highest income populations are located in CT 40 and 42, in the vicinity of Union Square. The unemployment rate is 10.1%, much higher than 5.6% in Manhattan. The 9.4% of unemployment isn't much of an improvement compared to a decade ago. (See Figure 1.3.6)

Community District Three's poverty rate is 22.2%, which is higher than that in overall Manhattan (14.3 %). The calculation of poverty rate, according to the Office of Management and Budget's³² Statistical Policy Directive 14, is determined by comparing annual income to a set of dollar values called thresholds that vary by family size, number of children, and age of householder. If a family's income before tax is less than the dollar value of its threshold, then that family and every individual in it are considered to be in poverty.

However the current report from the US Census data shows the city's unemployment rate dropped from 9.7 % in March to 9.5 %. In a 2012 press release Mayor Bloomberg said, "New York City's private sector job gains are the best in 60 years and represent another hopeful sign for our economic recovery. Just this week, we unveiled a new map showing hundreds of tech startups that are hiring; Major League baseball decided to hold a major tourism event with enormous economic impact here; and six new primetime television shows that will be filmed in New York and employ thousands were picked up by networks. Industries like tech, tourism and entertainment are helping to diversify our economy, and that means all New Yorkers will have better opportunities in the long-term".³³ In addition to that, Bloomberg and New York City's Chief Digital Officer, Rachel Sterne, revealed an interactive map that shows available tech jobs across the city.³⁴

Yet, there is a critical sarcasm to these statistics. About half of the city's drop in unemployment was caused by a decrease in the number of unemployed residents, while the rest is attributable to a decline in the number of people looking for work, said James P. Brown, principal economist for the Labor Department.³⁵

Manhattan Community District 3



New York City at Large

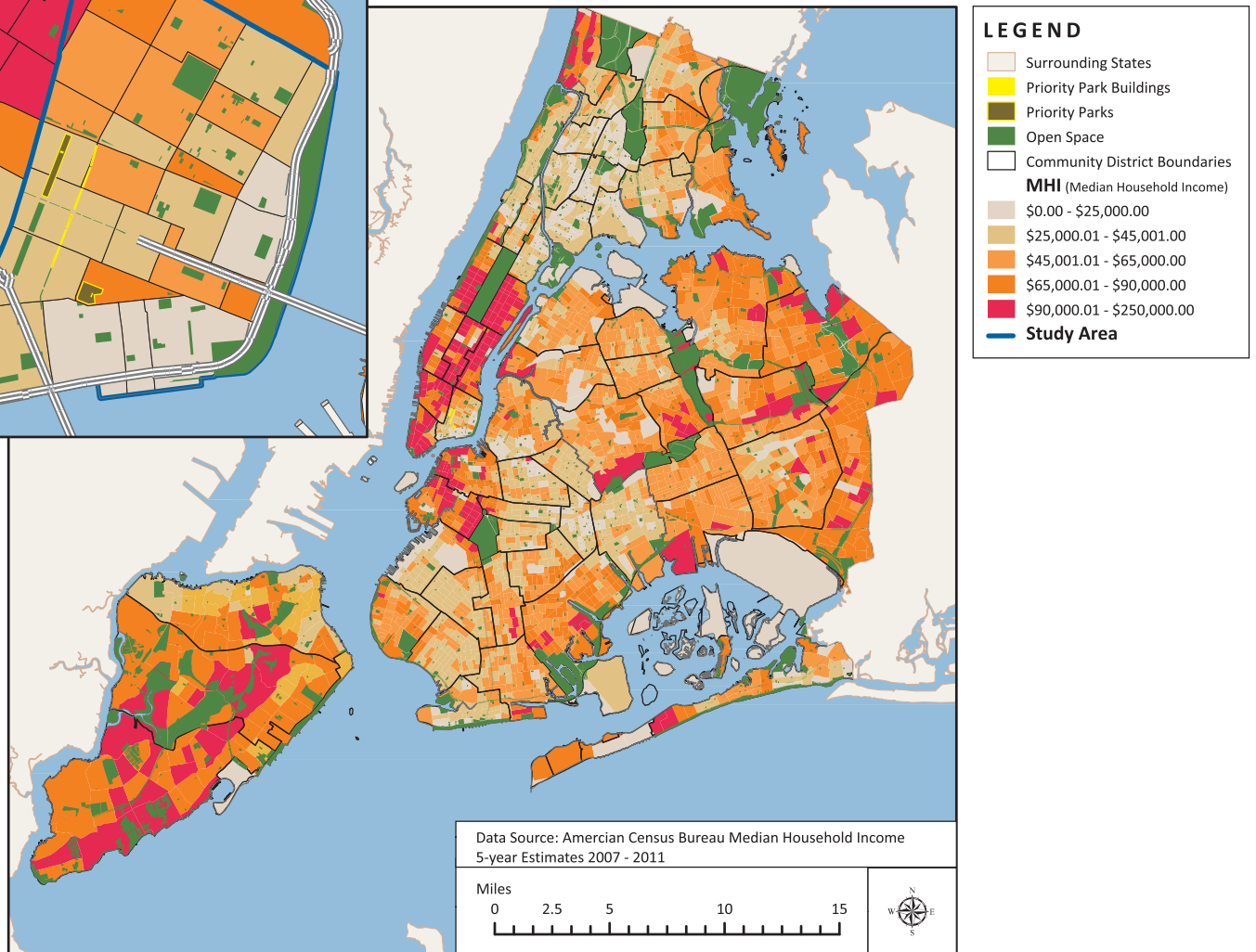


Figure 1.3.6 – Median Household Income in Manhattan CD3 compared to all of NYC

1.3.5. Education Attainment and Linguistic Isolation

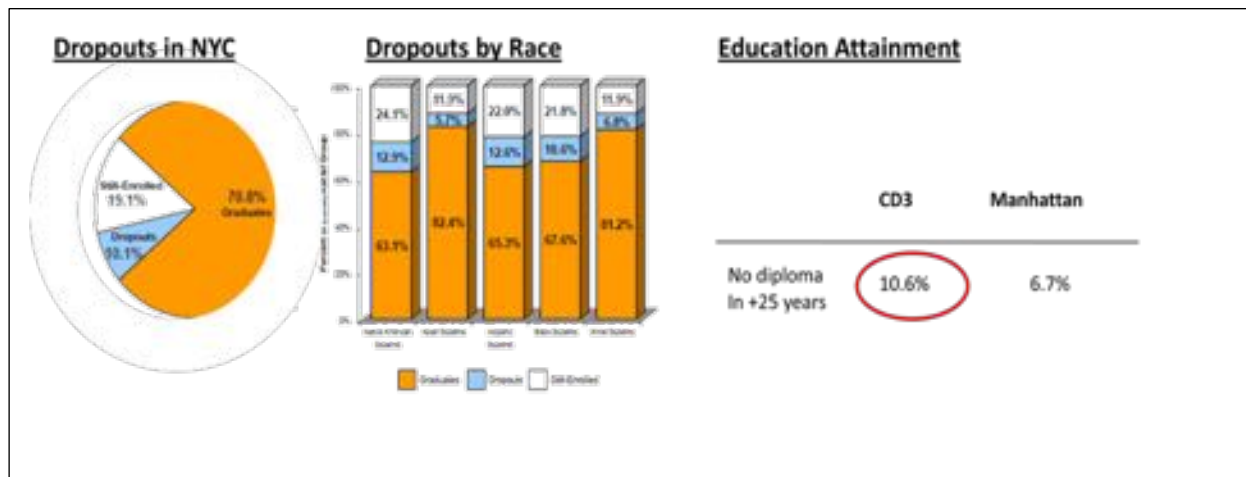


Figure 1.3.7 – NYC Department of Education – The Class of 2011 4 Year Longitudinal Report (Dennis M. Walcott, Chancellor)

In 2010 the dropout rate nationwide improved to 7.4% from 12.1% in 1990. However, each year 1.3 million students don't graduate. The graduation rate in Manhattan for high school and higher is 85%. An audit found that for the 2004 - 2008 school years the dropout rate could have been as high as 16.5 %. Department of Education reported a 13.0% dropout rate for its 2004-08 general education cohort.^{36 37} (See Figure 1.3.7)

New York State dropout rate is 26% and the dropout rate in NYC is 10.1%, much lower than New York State. The Asian population's dropout rate in NYC the lowest at 5.7% and Native

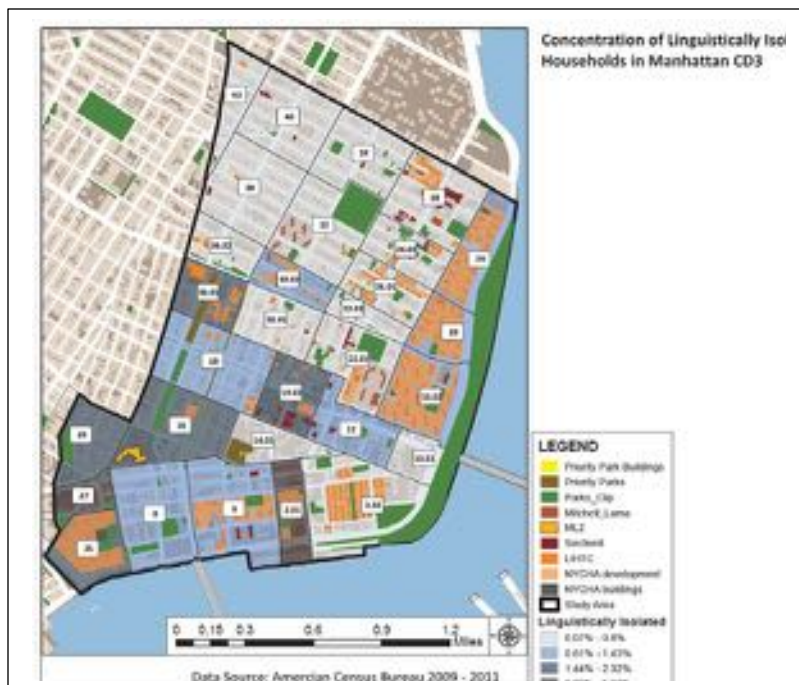


Figure 1.3.8

American's at 12.9% have the highest, followed by Hispanics at 12.6%.³⁸ The education attainment level in CD3 is nearly half that of Manhattan's and can be proven by 10.6% of its population over 25 years old not having a diploma.

Another issue relating to education in CD3 is linguistic isolation. Linguistic isolation is correlated with immigration and education; 2.73% of households in CD 3 are linguistically isolated. The area around the three parks are highly linguistically isolated (CT 36.01) and in the same area, there are 37.4% foreign born - of

which Asians comprise 50.1%, and Latin Americans 33.4%. The most challenging areas are CT 2.01 and 27, with 46% foreign born (1,850) and 87% of Asia-born and 46% of non US Citizenship. However, at the high school grade level reading has improved to 50.7% from 41% in 2000, this is a sign of improvement. (See Figure 1.3.8)

1.3.6. Public Health

There are three categories of disabilities: physical, mental, and sensory. The physically disabled population is highly concentrated in CT 2.02, 10.02, 12, 20, 28, along the water front. These CT areas are home to the least amount of full-time workers and the highest amounts single parent households and senior population. These areas also happen to be near the waterfront. So, we can assume that the vulnerability at the waterfront is more serious. As learned from Sandy, waterfront areas with senior, single parent, and physically disabled populations become vulnerable and open to potential public health problems. (See Figure 1.3.9)



Figure 1.3.9 – NYC Department of City Planning, PLUTO_2012

1.4 History of the area, Citywide Context, Residents and Community Facilities SWOT Analysis

Strengths

- Deep historical roots, inhabited since the 1800's by the Irish, German, Italian, Poles, Ukrainian, Latino, Asian and Russians
- Highest distributed amount of public schools in all of Lower Manhattan (46 Public School in CD 3 compared to 38 public schools in CD7)
- Frequent use of local public libraries (Chatham Square Regional Library and Seward Park Library)
- After-school programs available through Department of Education
- Highest educational levels among the Asian population, proven by lowest dropout rate of 5.7% and highest graduate rate of 82.4% in high schools
- Long tradition of community based activities
- Presence of many (over 82) and active participation of non-profit organizations
- Presence of cultural institutions
- Mixed income - highest is \$101,886 in CT 42 and lowest is \$14,767 in CT 25.

Weaknesses

- Small number of social service centers in low-income area (Senior center, health-related, etc.)
- No major hospitals
- Linguistic isolation in areas where foreign-born populations are concentrated
- Increasing number of senior generation (+65)
- Decreasing number of youth generation (-18)

Opportunities

- Youth population concentrated on the public housing sites (CTs 10.02, 20, and 24)
- Youth has potential to provide community services in environmentally vulnerable area
- Ethnic diversity and presence of cultural organizations to foster cultural activities
- Diverse kinds of galleries, museums and culturally diverse people to promote the development of creative urban environments
- Diversity of cultural festivals to strengthen the area as a destination district

Threats

- Decreasing number of Hispanic and other peoples of color and increase of white population as a sign of gentrification and/or displacement
- Concentration of vulnerable populations (single parent household, senior generation, physically disabled population and low income households) at the waterfront, which is susceptible to hurricane storm surge and floods
- Increasing drinking problem, proven by over 0.05% of hospitalization in +18 adults
- Higher mentally disabled populations than the average of Manhattan, more than 1 in 20 in adults

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- ¹ **Ratcliffe, C.** (Last date Modified 2013). <http://www.lespi-nyc.org/history/timeline-of-the-lower-east-side.html> & A Thin Green Line: A Select Annotated Bibliography. Retrieved from: <http://www.lespi-nyc.org/history/timeline-of-the-lower-east-side.html>
- ² **Sanderson, E.** (2009). *Mannahatta: A Natural History of New York City*
- ³ **Fullilove, Mindy Dr.** (2013) "Public Health, Emergency Response, Public Space: Looking for the Common Denominator" lecture at Pratt Institute
- ⁴ **Tolan, T.** (2003, April). Nueva Yores. (Riverwest Currents, Ed.) Milwaukee, WI, USA. Retrieved from <http://www.riverwestcurrents.org/2003/April/000562.html>
- ⁵ **Loisada, Inc.** <http://www.loisaidainc.org/About-Loisaida.html>
- ⁶ **Smith, Greg B.** (2010). Manhattan's diversity ebbing as city demographics evolve, new census figures show. *The New York Times*, <http://www.nydailynews.com/new-york/manhattan-diversity-ebbing-city-demographics-evolve-new-census-figures-show-article-1.475650>
- ⁷ <http://www.aafe.org/about-us/who-we-are>
- ⁸ **Katzman, M. T.** (1968). Discrimination, Subculture, and the Economic Performance of Negroes, Puerto Ricans, and Mexican-Americans. *American Journal of Economics and Sociology*, 27: 371–375. doi: 10.1111/j.1536-7150.1968.tb03082.x
- ⁹ <http://www.nycommunitytrust.org/Newsroom/LatestNews/tabid/626/smId/1061/ArticleID/211/reftab/541/Default.aspx>
- ¹⁰ **Howes, N.** "Lower East Side: Oral Histories"
- ¹¹ **Riis, Jacob A.** (1902). "Chapter 11: Letting in the Light". *The Battle with the Slum*. New York: MacMillan Company. Retrieved July 24, 2011.
- ¹² <http://www.thelodownny.com/leslog/2013/02/oped-its-time-to-reactivate-stanton-street-park-building.html>
- ¹³ <http://www.nytimes.com/2007/05/06/nyregion/thecity/06hist.html>
- ¹⁴ **JACOBS, J.** (1992). *The death and life of great American cities*. Boston, MA: Random House.
- ¹⁵ <http://www.oasisnyc.net/garden/resources.aspx>
- ¹⁶ **Hunt, Richard P.** (1962, Dec 26). Expressway Vote Delayed By City: Final Decision Is Postponed After 6-Hour Hearing. *New York Times*
- ¹⁷ **Ingraham, Joseph C.** (1960). State Presses City on Starting Lower Manhattan Expressway. *New York Times*
- ¹⁸ NYC Nonprofit Assistance
- ¹⁹ <http://www.thelodownny.com/info>
- ²⁰ <http://www.aafe.org/about-us/who-we-are>
- ²¹ <http://hesterstreet.org/about-us/>
- ²² New York City Department of Education
- ²³ **Hedlund, Patrick** <http://www.dnainfo.com/new-york/20101130/lower-east-side-east-village/kenny-scharf-completes-mural-on-houston-street-following-footsteps-of-friend-keith-haring>
- ²⁴ Department of Health and Mental Hygiene, Community Healthy Profile Lower East Side
- ²⁵ Department of Health and Mental Hygiene, Community Healthy Profile Lower East Side
- ²⁶ U.S New York Police Department
- ²⁷ NYC Census Bureau (Manhattan CD3 Profile from US Census Bureau, American Community Survey)
<http://www.nyc.gov/html/dcp/pdf/lucds/mn3profile.pdf>
http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf
<http://www.nyc.gov/html/dcp/pdf/census/census2010/pgrhc.pdf>
<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

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- ²⁸ **Roberts, Sam**, 2012 New York Times from <http://www.nytimes.com/2012/04/05/nyregion/census-estimates-for-2011-show-population-growth-in-new-york.html>
- ²⁹ Department of City Planning Retrieved from http://www.nyc.gov/html/dcp/html/census/nny_exec_sum.shtml
- ³⁰ Area Vibes, 2012 retrieved from <http://www.areavibes.com/new+york-ny/chinatown/employment/>
- ³¹ FURMAN CENTER DEMOGRAPHIC INFORMATION Retrieved from Furman report (2011)
- ³² "How Poverty Is Calculated in the ACS" at www.census.gov/hhes/www/poverty/methods/definitions.html
- ³³ Staten Island Advance, 2012 retrieved from http://www.silive.com/news/index.ssf/2012/05/job_gains_in_new_york_city_are.html
- ³⁴ Huffington Post, 2012 retrieved from http://www.huffingtonpost.com/2012/05/18/new-york-city-unemployment-rate-drops-department-of-labor_n_1527069.html
- ³⁵ New York Times, 2012 from <http://www.nytimes.com/2013/03/08/nyregion/new-york-city-jobless-rate-hit-9-1-percent-in-january.html>
- ³⁶ **DiNapoli, T**, 2009, New York City Department of Education, Accuracy of Reported Discharge Data by Thomas DiNapoli retrieved from http://gothamist.com/2011/03/30/do_graduation_rates_mean_anything_a.php
- ³⁷ DOE – NYC retrieved from http://schools.nyc.gov/NR/rdonlyres/C6A30FBB-99A7-4616-9992-FD8BC8F29896/0/The_Class_of_2011_4Yr_Graduation_and_Dropout_Report.pdf
- ³⁸ DOE – NYC retrieved from <http://schools.nyc.gov/Accountability/data/GraduationDropoutReports/default.htm>

1.1 Elected Officials

NYS SENATE DISTRICT - 26 Hon. Daniel L. Squadron Democrat 212-298-5565 250 Broadway Suite 2011, New York NY, 10007 squadron@senate.state.ny.us 	NYS SENATE DISTRICT - 27 Hon. Brad M. Hoylman Democrat 212-633-8052 322 8th Ave. Suite 1700, New York NY, 10001 hoylman@senate.state.ny.us 
US CONGRESSIONAL DISTRICT - 12 Carolyn B. Maloney Democrat (212) 860-0606 1651 3rd Ave. Suite 311, New York NY, 10128 rep.carolyn.maloney@mail.house.gov 	US CONGRESSIONAL DISTRICT - 7 Nydia M. Velázquez Democrat (212) 673-3997 173 Avenue B, New York NY, 10009 nydia.velazquez@mail.house.gov 
NYC MAYOR Hon. Michael R. Bloomberg Independent 311 or (212) 788-9600 City Hall, New York NY, 10007 http://nyc.gov/html/mayor/html/mayor.html 	NYC PUBLIC ADVOCATE Hon. Bill de Blasio Democrat (212) 669-7200 (212) 669-7250 Municipal Building 1 Centre Street 15th FL. cmhufelman@publicadvocate.nyc.gov 
NYC COMPTROLLER Hon. John C. Liu Democrat (212) 669-3500 Municipal Building 1 Centre Street 15th FL action@comptroller.nyc.gov 	MANHATTAN BOROUGH PRESIDENT Hon. Scott Stringer Democrat (212) 669-8300; (212) 316-8061 1 Centre Street 19th Floor, New York NY, 10007 bp@manhattanbp.org 
NYC COUNCIL DISTRICT - 1 Margaret Chin Democrat (212) 587-3159 165 Park Row Suite 11, New York NY, 10007 chin@council.nyc.gov 	NYC COUNCIL DISTRICT - 2 Rosie Mendez Democrat (212) 677-1077 237 First Avenue Suite 504, New York NY, 10003 rosie.mendez@council.nyc.gov 
NYS ASSEMBLY DISTRICT - 65 Hon. Sheldon Silver Democrat (212) 312-1420 250 Broadway Suite 2307, New York NY, 10007 silver@assembly.state.ny.us 	NYS ASSEMBLY DISTRICT - 66 Hon. Deborah I. Glick Democrat 212-674-5153 853 Broadway Suite 2120, New York NY, 10003 glick@assembly.state.ny.us 
NYS ASSEMBLY DISTRICT - 74 Hon. Brian P. Kavanagh Democrat 212-674-5153 237 1st Avenue Room 407, New York NY, 10003 kavanabh@assembly.state.ny.us 	MANHATTAN COMMUNITY BOARD 3 District Manager: Susan Stotzer Board Chair Gigi Li 59 East 4th Street, New York, NY 10003 Phone: 212-533-5300 info@cb3manhattan.org 

2

2A Landuse, Zoning & Urban Design **2B** Parks, Open Space
System, & Green Infrastructure **2C** Infrastructure & Transportation
Utilities, Disaster Risk & Environmental Justice

MARIANA RICH,
VICTOR COACHMAN,
CHRISTOPHER RICE &
MELANIE TRUHN



LAND USE, ZONING, & URBAN DESIGN Landuse (LU) Overview; LU: Residential & Mixed Use; LU: Commercial, Mfg.; LU: Parking Facilities & Vacant Lots; LU: Public Facilities & Institutions; LU: FAR (floor area ratio); LU: Zoning Districts; Urban Design

Chapter 2: Land Use, Zoning, and Urban Design, Parks, Open Space System, and Green Infrastructure, Disaster Risk and Environmental Justice

Land use and zoning regulations shape communities long after they are approved and implemented. In this regard, Community District Three is no different. The major land uses and distributions of space are detailed in this chapter. The land use and zoning policies affect the availability and ease of access to open space resources such as parks, playgrounds, and gardens. Land use and zoning decisions also directly impact the risk that communities are exposed to in the event of disasters and their aftermaths concerning public health. This research is documented in this section.

2.1 Land Use, Zoning, and Urban Design

In this chapter the eleven land uses in the study area will be analyzed as well as who own most of the vacant lots. It includes a study of underdeveloped and overdeveloped areas in order to obtain the developable area that still remains in CD 3. We also go through the 2008 The East Village / Lower East Side Rezoning which addresses inclusionary housing and contextual zoning, and finally this chapter will look at the existing building typology and how new developments have had an impact within the existing context in the area.

2.1.1 Land Use

As seen in Figure 2.1.1, the three main uses in the study area are residential with 33% of the land use, mixed residential with 22% and open space & outdoor recreation occupying 16% of land use. Community District Three has 9% less land used for open space than in greater Manhattan (25%).

The 4,318 lots in the study area make up 770 acres within five neighborhoods: Two Bridges, East Village, The Lower East Side, Chinatown and Alphabet City.

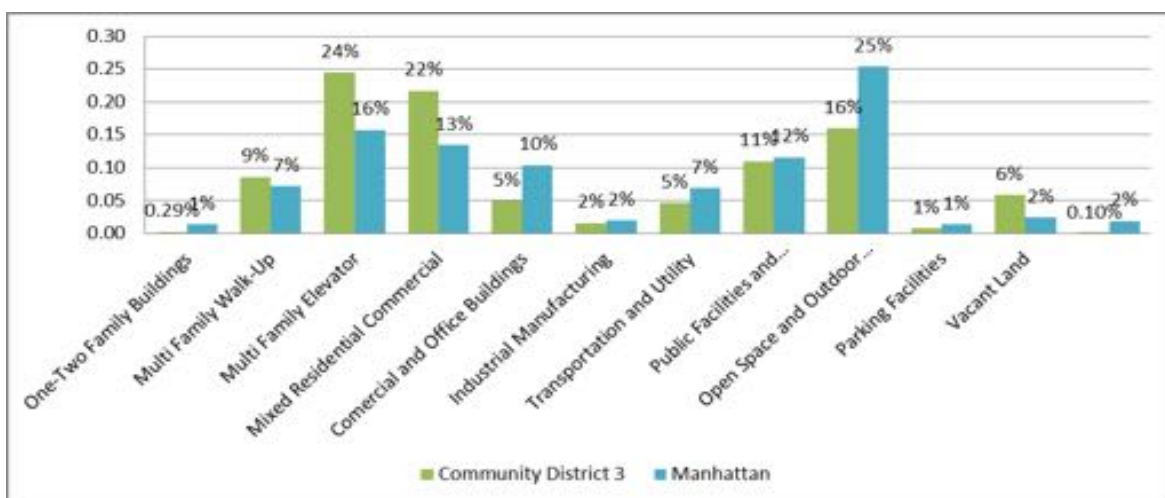
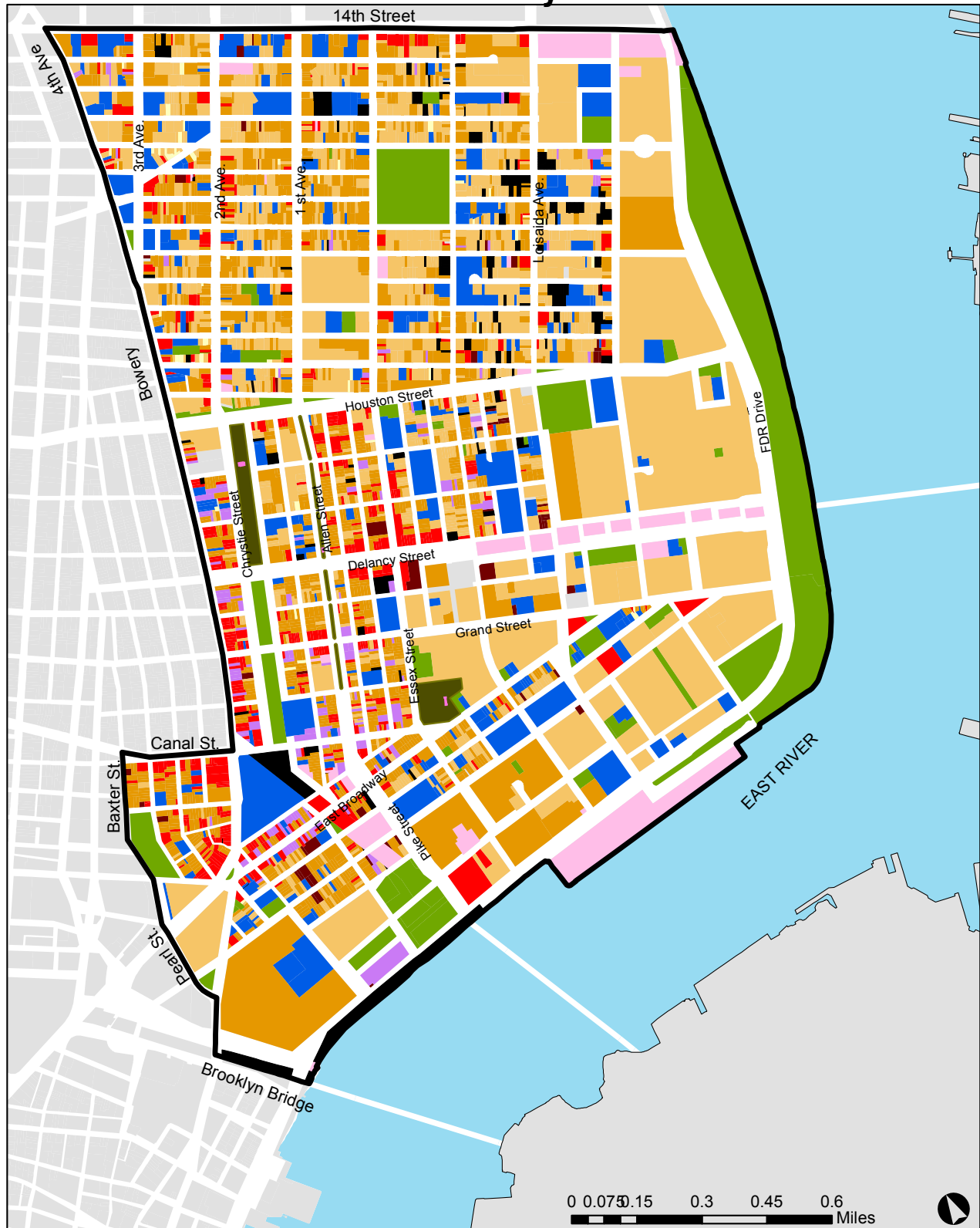


Figure 2.1. 1

Source: NYC Department of City Planning, PLUTO, 2012

Land Use Manhattan Community District 3



Data Source: NYC Department of City Planning, PLUTO, 2012

Figure 2.1.2

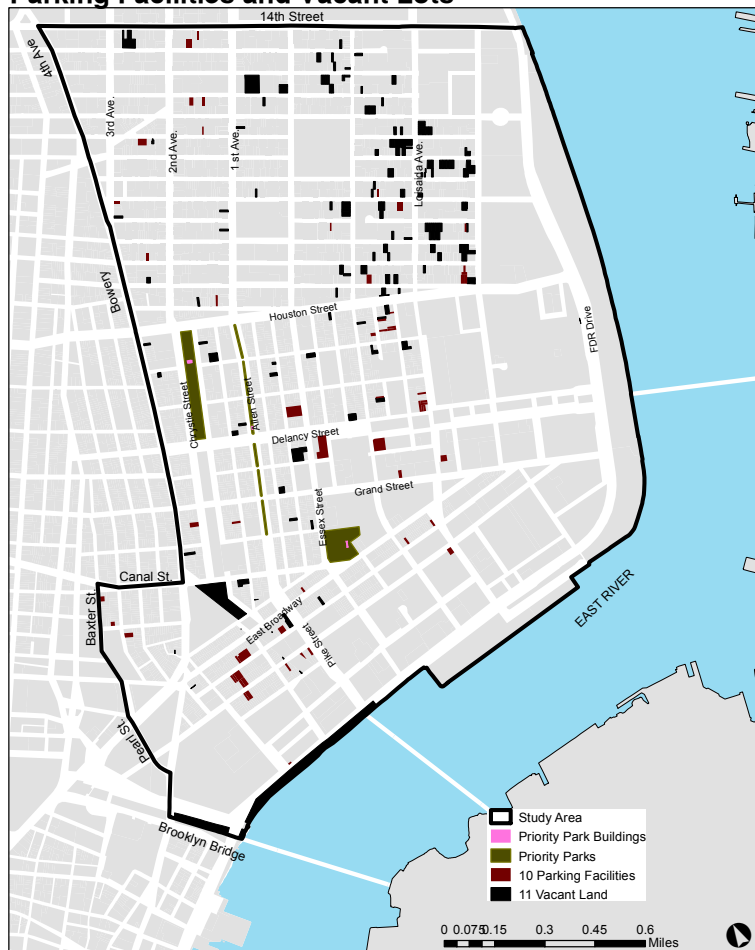
There are eleven categories of land uses in the study area; the main characteristics of each use follows:

Residential: Will be further described in Chapter 3, but it is the predominant use in the study area with 33.35%. Residential land use is divided into one-two family buildings and multi family buildings. Multi family buildings are divided in walk-up buildings representing 9% and elevator buildings representing 24%. Elevator buildings dominate the east side closest to the waterfront and usually are placed on large lots.

Mixed Residential Commercial: Represents 22% of the land use or 1,728 lots; most of them are smaller than the multi family building lots and are located throughout CD3, except near the waterfront.

Commercial and Office Building: Make up 5% of the land use and are predominately on the west side of the study area. Commercial uses concentrate along major avenues and streets such as Houston, Delancey, Bowery and Canal Streets

Parking Facilities and Vacant Lots



Data Source: NYC Department of City Planning, PLUTO, 2012

Industrial and Manufacturing: These are mainly located in the southwest side near Chinatown, along Sara D. Roosevelt Park, Allen Street and East Broadway, with the 2% of land use.

Transportation and Utilities: Are concentrated in three main areas - under the Williamsburg Bridge, on 14th Street and FDR Drive, and on the waterfront near the Manhattan Bridge. Transportation and utilities represent 5% of the overall land use.

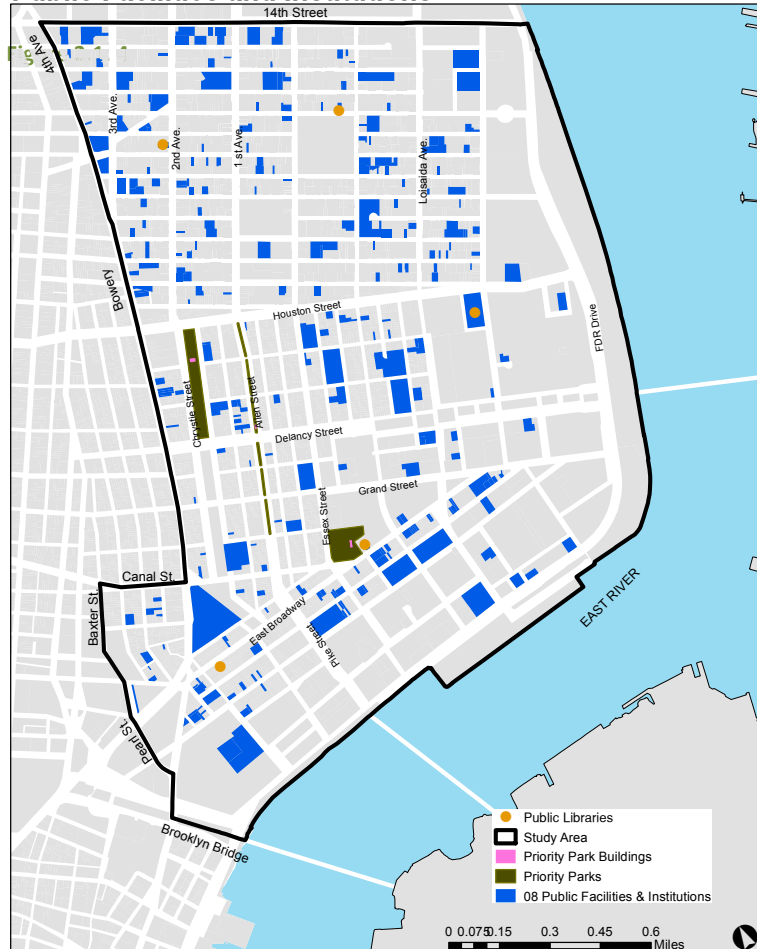
Open Space and Outdoor Recreation: Will be fully expanded on in section 2.2 of this chapter; represents the 16% of the land use. One half (63 acres) of that open space is located on the waterfront.

Parking Facilities: Take up 1% of the land with 58 lots, this percentage is the same percentage as Manhattan. Mostly located in the East Village / Alphabet City and The Lower East Side.

Figure 2.1. 3

Vacant Land: While in all of Manhattan only 2% of the land is vacant, in all of CD 3, 6% of the land is vacant, leaving 44 acres of underutilized land. According to PLUTO database, this comprises 182 vacant lots of which 40% of them are privately-owned, while 55% are owned by the city. The Mayoral Agencies who own these lots are: Parks and Recreations, Board of Education, and Housing Preservation. (see appendix a)

Public Facilities and Institutions



Data Source: NYC Department of City Planning, PLUTO, 2012

Figure 2.1. 4

2.1.2. Zoning

Zoning is a tool for implementing the city's planning and development objectives by regulating land use, density, and building bulk. Within the study area we have contextual zoning districts that were created to produce buildings that are consistent with the existing neighborhood character.² The two zoning districts that dominate the area are residential and commercial; nevertheless there are also manufacturing districts close to the waterfront.

Public facilities and Institutions:

There are 294 public facilities in the study area. They are spread out over CD3 and make up 11% of the land use.

Street Layout

The street grid in the study area has three different patterns divided by Houston Street, Delancey street and East Broadway. The grid above Houston is a continuation of the Manhattan grid system; south Houston and East Broadway, the grid forms rectangular blocks that are longer in the north-south direction; and south East Broadway to FDR Drive, blocks are longer in the east-west direction facing to the waterfront.¹

Zoning Districts

Most of Community District Three is a contextual zoning area which has R7A, R7B, R7-2 R8 and R8B residential districts, many with commercial overlays C1 and C2 along avenues and streets are included in these districts; and C4-4A, C6-2A, commercial districts. The study area also has some special commercial districts, which attempt to preserve the character of commercial areas within historic districts by permitting only those commercial uses compatible with the historic district.³ As well as the Special Transit Land Use Districts mapped at locations along Second Avenue between Chatham Square in Chinatown, this relates to development along Second Avenue for the future subway line.⁴

Zoning

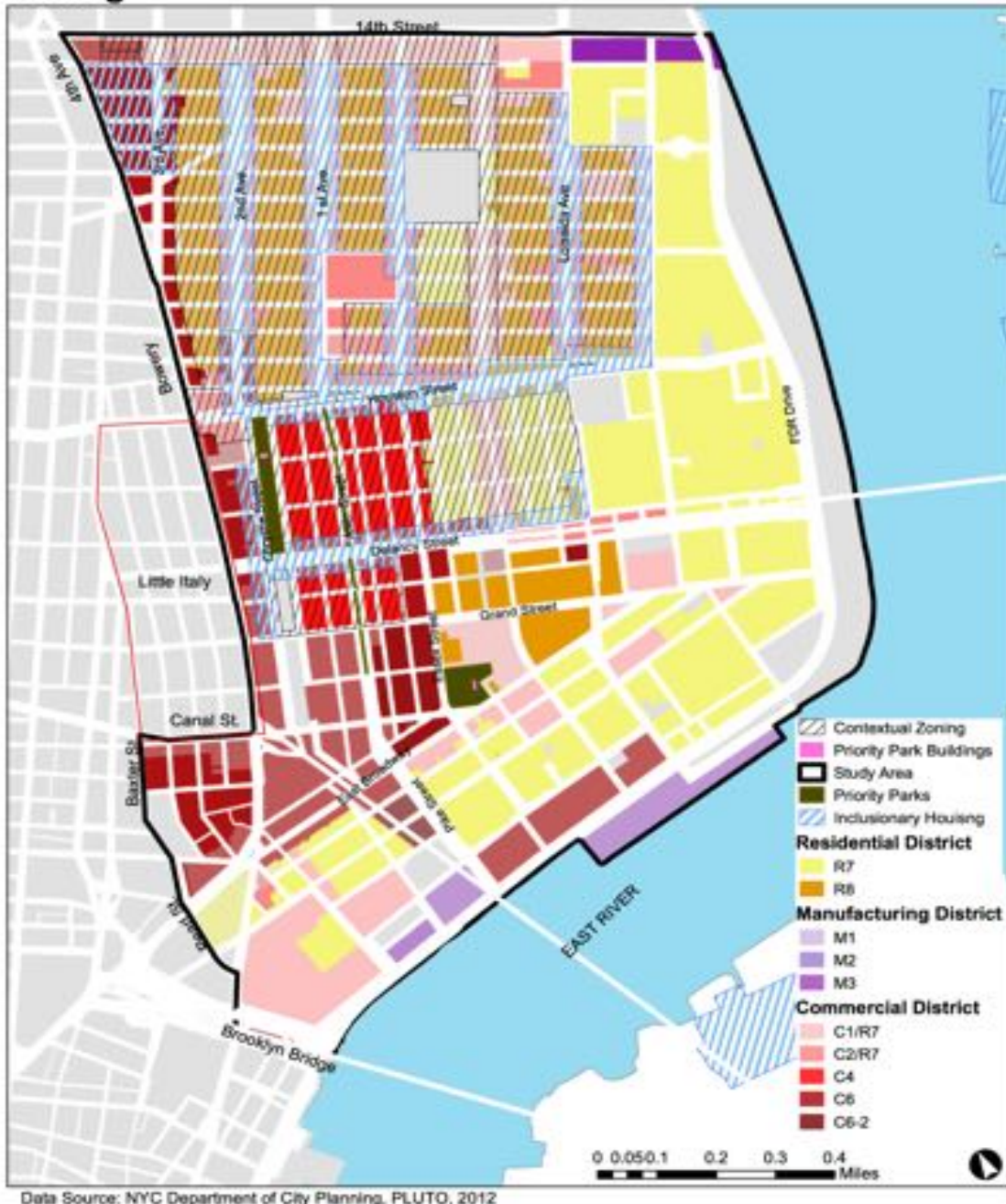
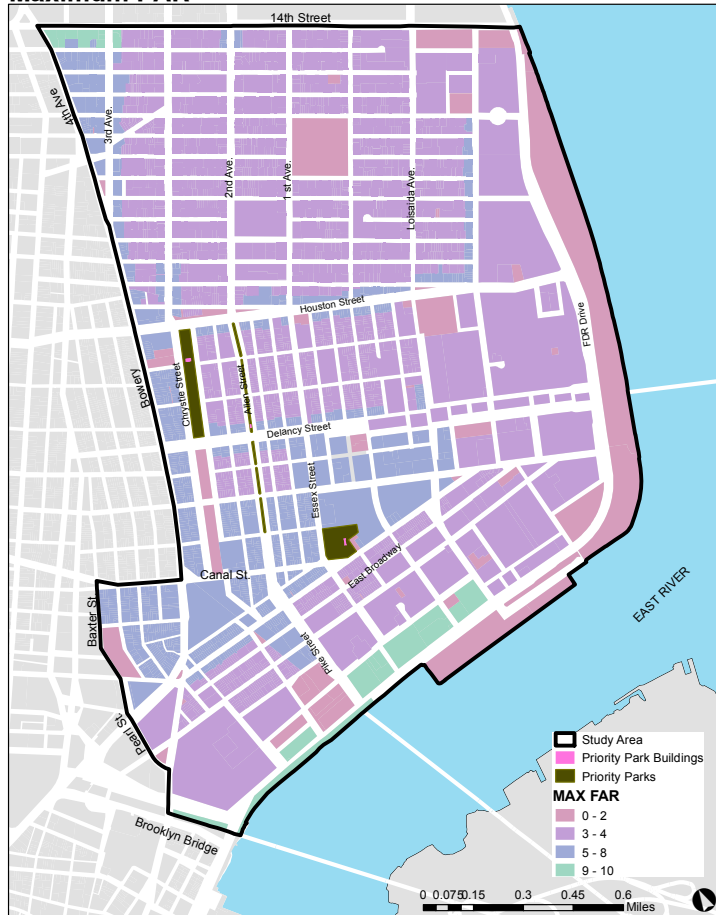


Figure 2.1. 5

Maximum FAR



Data Source: NYC Department of City Planning, PLUTO, 2012

Figure 2.1. 6

Maximum FAR

The maximum FAR is documented by the NYC Department of City Planning's PLUTO land use database, and shows the maximum allowable and built FAR of each lot. For example a 10,000 square foot zoning lot in a district with a maximum FAR of 1.0, the floor area on the zoning lot cannot exceed 10,000 square feet.⁷

The highest FAR found to be permitted in the study area is 10 and is located on main streets like Houston, Delancy, Essex and Canal.

Nevertheless the built FAR indicates otherwise. Even though most of the lots have a built FAR of 3 or 4, some others have built indicators of 13, 24, 44 and even 62.

Figure 2.1. 7

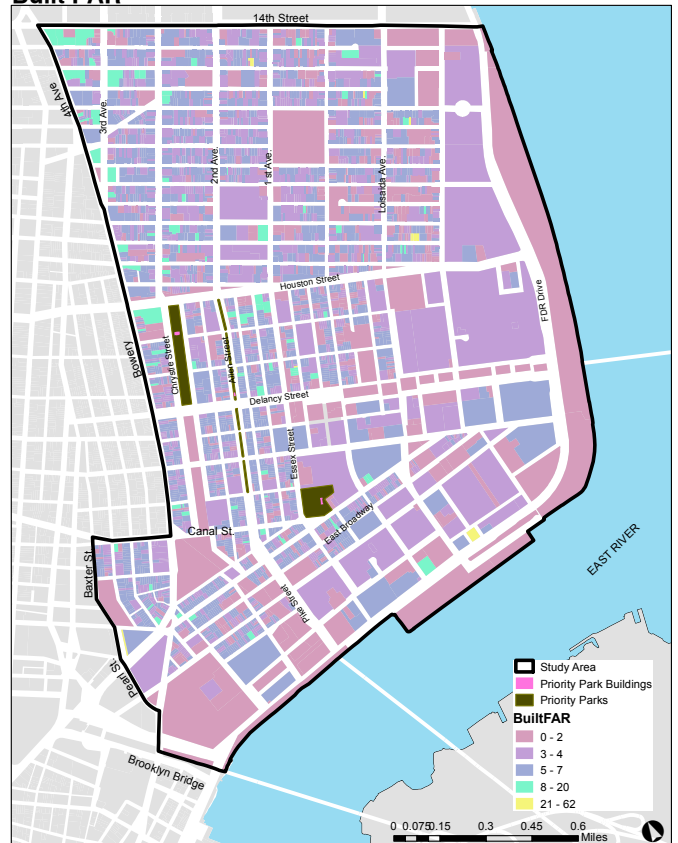
Density Analysis – Floor Area Ratio

The Floor Area Ratio, or FAR, is a measure of intensity of development on a given lot, the FAR is the principal bulk regulation, controlling the size of buildings and varies depending on the district.⁵

The NYC zoning resolution indicates the following district with the following maximum FAR for CD3:

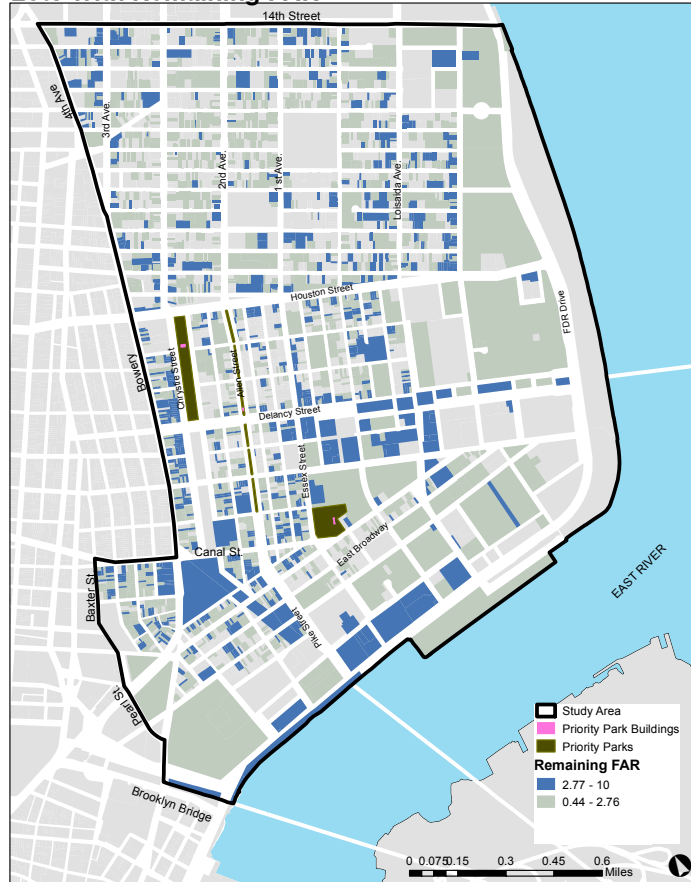
4 to R7A, FAR of 3 to R7B, FAR of 4 to R8B, FAR of 0.94-6.02 to R8, FAR of 4 to C4-4A, FAR of 6 to C6-2A and C6-1, and an FAR of 2 to MI-4.⁶

Built FAR



Data Source: NYC Department of City Planning, PLUTO, 2012

Lots With Remaining FAR



Data Source: NYC Department of City Planning, PLUTO, 2012

Developable Area

In order to achieve this research using the PLUTO database, the lots' maximum FAR and built FAR were compared to identify the overdeveloped and underdeveloped areas.

Overdeveloped areas are those in which the built FAR is higher than the FAR allowed in that district.

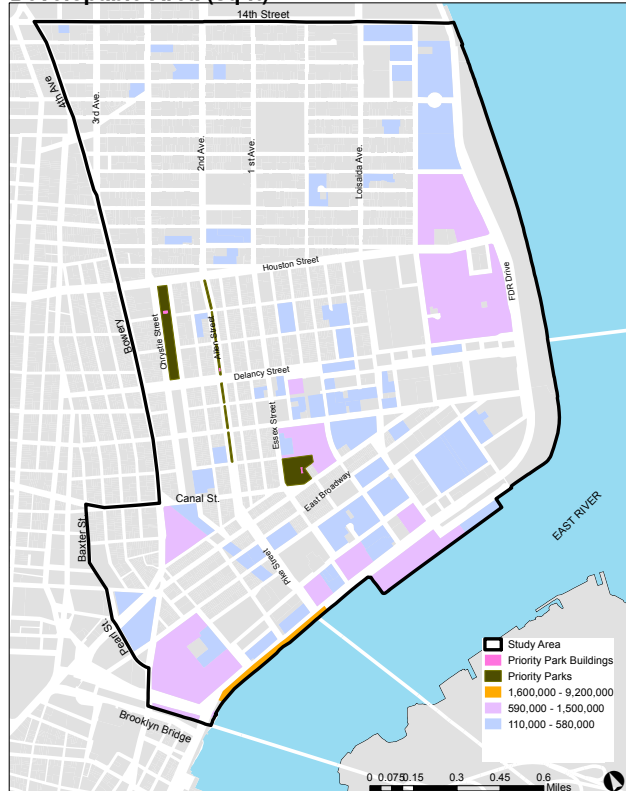
Underdeveloped areas are those in which the built FAR is lower than the one allowed

As seen in figure 2.1.8, there are 3,053 lots with remaining FAR.

The developable area is found by multiplying the remaining FAR by the lot area and is expressed in figure 2.1.9. The developable area is about 1,281 acres in Lower East Side and is mostly located near the waterfront.

Figure 2.1.8

Developable Area (sq ft)



Data Source: NYC Department of City Planning, PLUTO, 2012

Figure 2.1. 9

buildings for NYU, Cooper Union and large-scale hotels.¹⁴ Much of the mid-rise character of the study area contrast with the new out of scale developments of 10 to 20 story towers along Bowery and in the Lower East Side.¹⁵ Parts of Chinatown is within the study area, being a 150-year old neighborhood, has been through many transformations, changing its traditional industries to more professional and personal services providers.¹⁶

Building Typology

The study area is characterized by a variety of older, mostly masonry-faced low-rise buildings, nevertheless the newer residential buildings, have glass curtain walls which contrast with the existing building typology. Many of the buildings have retail use at the street level.¹⁷

As it is said in The East Village / Lower East Side Rezoning, Final Environmental Impact Statement, buildings along many of the narrow east-west streets and wider streets, including East Houston Street as well as First and Second Avenues, contribute to continuous street walls that help define view corridors. Building heights and styles are more constant along the east-west residential streets when compared to the wider north-south avenues and East Houston Street.¹⁸

Most of the buildings in East Village and Lower East Side are attached and narrow with 20- to 25-foot widths¹⁹; there are brick walk-up tenements and three- to four-story brick rowhouses with the exceptions of the village public housing units close to the waterfront. Some cultural institutions are housed in former tenements and other buildings that were adapted.²⁰

From Bowery to Eldridge St. most residential buildings are low- to mid-rise attached rowhouses or apartment buildings with retail at the street level. As previously described, commercial and industrial buildings appear more near the Bowery side of the district.²¹



Figure 2.1. 11

One of the actions to be achieved in the rezoning of 2008 was protecting the views of Tompkins Square Park, Sara D. Roosevelt Park, and views east along Delancey Street toward the Williamsburg Bridge from being blocked by new developments.²²

A number of tenements along Forsyth Street and Delancey Street are registered landmarks. These include the Landmark Theaters' Sunshine Cinema, a three-story building faced in tan brick with decorative orange brick framing the upper floor windows; and the University Settlement House at 184 Eldridge Street, which continues to offer social welfare programs, has a restrained design with a rusticated ground floor and upper floors primarily ornamented with stone window lintels and keystones. According to the Mayor's Office of Operations Agency Performance Reporting, CD3 is one of the highest areas in NYC with individual landmarks and historic districts designated.²³



PARKS, OPEN SPACE SYSTEM, & GREEN INFRASTRUCTURE

Parks in Community District 3, Open Space System in CD3, & Green Infrastructure.

2.2 Parks and Open Space System, and Green Infrastructure

Open space is an important area of focus for Manhattan Community District Three. Open space components such as parks, community gardens, playgrounds and other niceties must be accounted for, as well as their distribution, maintenance, and condition. This section discusses the layout and distribution of parks and open space areas in CD 3. Also, the green Infrastructure plan for the city and extent of CD3 involvement with the plan and other projects are discussed.

2.2.1 Parks and Open Space System



Figure 2.2.1: Official Parks Layout and Distribution Source: East Village/Lower East Side Rezoning Final Environmental Impact Statement , Volume 1, Chapter 5

As mentioned in section 2.1 CD 3 classifies nearly 15.9 % of its total land area as Open Space/Recreation Use.²⁴ There are over 100 open space resources in the area and beyond. The resources are comprised of parks, playgrounds, community gardens, and other amenities. They are listed in an environmental statement on the area done by the city as being, on average, in excellent quality.²⁵

Open space may be public or private. According to the City Environmental Quality Review, open space is considered public if it is “accessible to the public on a consistent and regular basis, including for designated daily periods. Space that is not accessible to the public regularly or only to certain people, is considered “private”. Use of these spaces is also further characterized as “active” or “passive”. Active open space is used for sports and active play, whereas open spaces are considered to be passive when they are used for relaxation²⁶. Also, because of the focus areas of this project, it is important to note that, according to the City Environmental Quality Review Technical Manual, both Seward Park and Sara D. Roosevelt Park have “Heavy” use, in addition to being in excellent condition.

This means that at least seventy-five percent of the area's capacity gets used during peak hours. This was consistent with observations made on our trips to the study area. Both parks meet the recommended guidelines of the active space ratio, which is 2.0 acres per 1,000 residents, in the city's environmental impact statement. However, Sara D. Roosevelt Park falls below the guideline with a passive ratio of 0.00 acres per 1,000 residents. The guideline for the passive use ratio is 0.5 acres per 1,000 residents.²⁷

All residents in CD 3 are within a ten-minute walk of some park. Most of the active space is made up of courts, athletic fields, and playgrounds. The district falls below proposed standards proposed in the Governor's Open Space Report, however, concerning tree canopy cover and the amount of permeable surfaces in parks. The parks in CD 3 are rated as "acceptable" for cleanliness by the Department of Parks and Recreation (see Figure 2.2.3).



Figure 2.2.2 shows the park areas and other green spaces.

The parks themselves are not evenly distributed and, despite the added garden areas, the district does not meet the City Planning Commissions guidelines for open space. The recommended open space/population ratio is 2.5 acres to every 1,000 people. The ratio for CD3 is nearly 0.7 acres per 1000 people; the average ratio for the entire city is around 1.5 acres per 1,000 people.

The community gardens, another important component of the open space system, are most concentrated in the northeastern area of the district. Also, the Stanton building in Sara D. Roosevelt Park is used by The Department of Parks and Recreation as a materials storage facility for the entire borough of Manhattan. This is a potential block for community use. In addition, several sidewalks have been found to be in poor condition in CD 3.²⁸ This poses a mobility issue for seniors and the handicapped to get to some open space areas. The remainder of this section will give some information about the environment with emphasis on the open spaces, parks, and local infrastructure—particularly green infrastructure.

Open Space Index: Lower East Side* <small>(*Neighborhood scale determined by PlaNYC neighborhood boundary) Neighborhood statistics: 535 acres; 72,258 residents; 18,181 children</small>			
Open Space Elements	Lower East Side Totals	Lower East Side Outcomes	Proposed Neighborhood Standards
Active and Passive Open Space			
Active Open Space & Facilities	30.7 acres	0.42 acres/ 1000 residents	1 acre of open space/ 1,000 residents
Playgrounds	50 playgrounds	3.4 playgrounds/ 1,250 children	1 playground/ 1,250 children
Athletic Fields	15 fields	2.1 athletic fields/ 10,000 residents	1.5 fields/ 10,000 residents
Courts	67 courts	9.3 courts/ 10,000 residents	5 courts/ 10,000 residents
Recreation Centers	2 recreation centers	0.6 recreation centers/ 20,000 residents	1 recreation center/ 20,000 residents
Passive Open Space	55.6 acres	0.8 acre passive open space/ 1,000 residents	1.5 acres of open space/ 1,000 residents
Community Gardens	40 gardens	5.5 community gardens/ 10,000 residents	1 community garden/ 10,000 residents
Total Acres of Open Space	86.3 acres	1.2 acres of open space/ 1,000 residents	2.5 acres of open space/ 1,000 residents
Access and Distance to Parks			
Walking Distance to a Pocket Park (Less than 1 acre)	12 pocket parks	100% of residents are within a 5 minute walk	100% of residents are within a 5 minute walk
Walking Distance to a Neighborhood Park (1-20 acres)	7 neighborhood parks	100% of residents are within a 5 minute walk	100% of residents are within a 5 minute walk
Walking Distance to a Large Park (20+ acres)	1 large park	100% of residents are within a 10 minute walk	100% of residents are within a 10 minute walk
Environmental Sustainability			
Urban Tree Canopy Cover	14%	14%	44% (neighborhood target based on US Forest Service Survey)
Permeable Surface within Parks	54.9 acres	63%	70%
Park Maintenance			
Parks rated overall "acceptable" by DPR	80%	80%	85%
Parks rated "acceptable" on cleanliness by DPR	93%	93%	90%

Figure 2.2.3: Open Space Index (2010)

Source: <http://www.ny4p.org/research/osi/LES.pdf>

2.2.2 Green Infrastructure

Some progress has been made in terms of built green infrastructure. According to Figure 2.2.4, in CD 3 there are three green roofs, a rain barrel, some cisterns, and a tree pit. There has also been reconstruction done on East Houston Street, the project mitigated pedestrian and bicycle crossings and implemented drainage improvements.²⁹ Figure 2.2.5 shows that CD3 has taken part in the MillionTreesNYC campaign and there are some areas of planting. MillionTreesNYC is a PlaNYC citywide initiative. It is a public-private program with a goal of planting and caring for one million new trees across the entire city over the next decade. Citizens can request street trees from the Parks Department. There is also a greenway along the length of East River Park. The city implemented its Green Infrastructure Plan, which proposed to:

- “Reducing CSO volume by an additional 3.8 billion gallons per year (bgy), or approximately 2 bgy more than the all-Grey Strategy;
- Capturing rainfall from 10% of impervious surfaces in CSO areas through green infrastructure and other source controls; and
- Providing substantial, quantifiable sustainability benefits – cooling the city, reducing energy use, increasing property values, and cleaning the air – that the current all Grey Strategy does not provide.”³⁰

Because the CD3 is served by a CSO (Combined Sewer Outflow) system, it may be eligible for the Green Infrastructure Grant Program through the Department of Environmental Protection’s Borough Water and Sewer Office.³¹

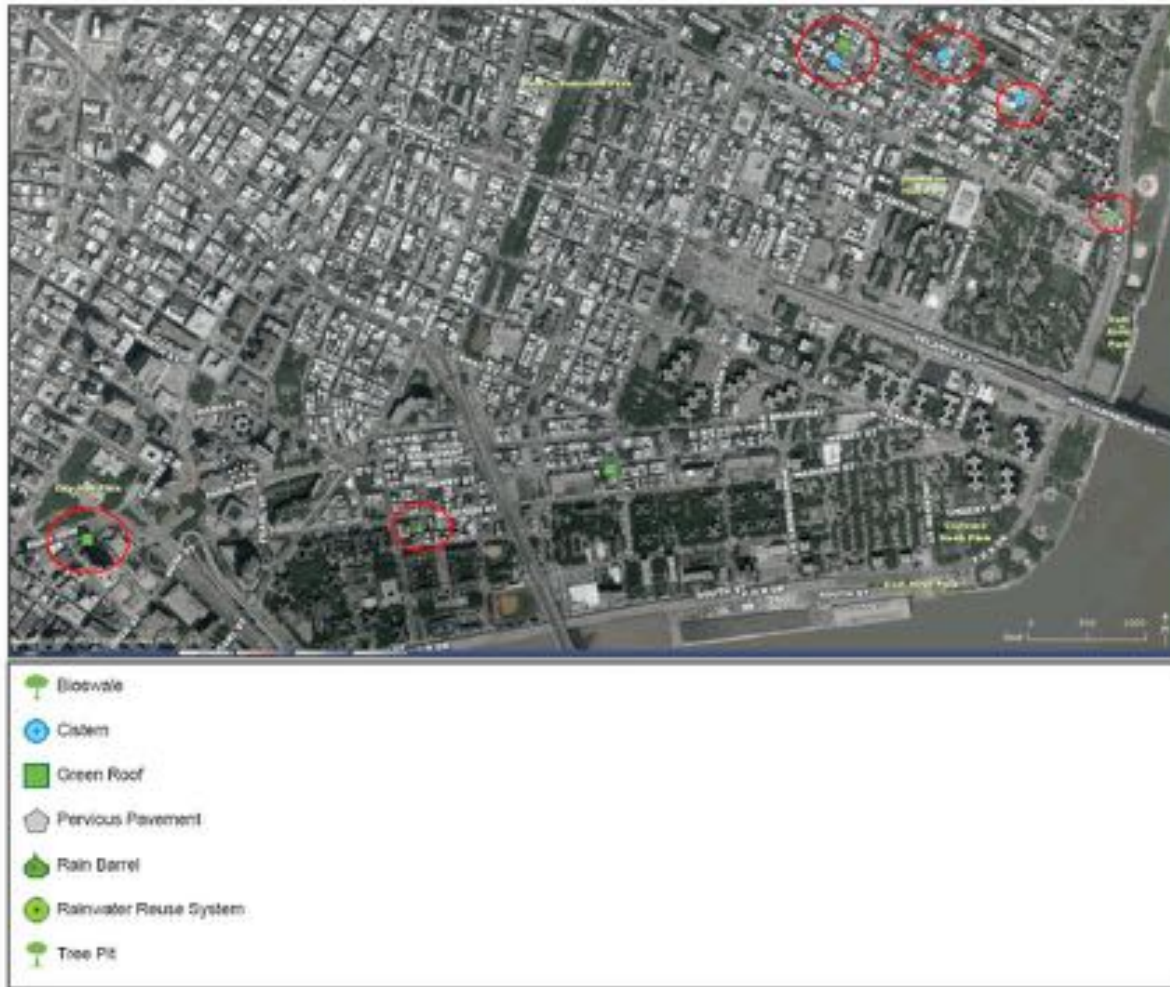


Figure 2.2.4: Community District 3 Green Infrastructure Map

Source: http://www.nyc.gov/html/dep/html/stormwater/nyc_green_infrastructure_plan.shtml



Figure 2.2.5: Planting of Trees for the MillionTreesNYC campaign

Source: Street Tree Block Planting Maps- Manhattan

2.3 Waterfront Development

AAFE Community Plan (2004)

In 2004, AAFE released *America's Chinatown: A Community Plan*, the plan was developed to: create a hub where East and West culture and commerce meet, open up Chinatown, and to assure Chinatown's abiding affordability and authenticity as an ethnic community. As part of this plan Chinatown's waterfront was envisioned as a multicultural park, with spaces for economic development as well as recreation and a garden experience.

The recommendations included:³²

- Creating one continuous waterfront promenade from the Brooklyn Bridge to East River Park and add Piers 36-40 to East River Park
- Relocating the Department of Sanitation (DOS) and EMA facilities
- Programming and designing the park with the Chinese-American subculture in mind
- Developing a major Chinese-themed hospitality and dining facility near the water
- Creating a parks conservancy
- Placing a regional attraction within the Piers 36-40 park element
- Planning the park with the residents of the Lower East Side as well as Chinatown
- Removing all of the barriers between the river and the people
- Highlighting the cross streets that tie the riverfront back to inland attractions
- Linking the new park to the larger bicycle and transit systems

New York City Economic Development Corporation, East River Waterfront Development

In 2004 the New York City Economic Development Corporation, the Department of City Planning, Department of Transportation, and Department of Parks and Recreation, with funding from the Lower Manhattan Development Corporation, undertook a yearlong study of the East River Waterfront Esplanade in lower Manhattan. A waterfront concept plan was developed by a team of architects, urban designers, landscape architects, and engineers, who worked closely with local community, area elected officials, city and state agencies, and civic associations. The East River Waterfront Esplanade is designed to improve access to the waterfront, enhance pedestrian connectivity, and create waterfront amenities for public use and enjoyment – with key features including sustainability, community programming, active recreational space, and a continuous bikeway. Phase I of the project was opened to the public in the summer of 2011. Bound by Wall Street and Maiden Lane, the completion of this phase included bar seating, lounge seating, plantings, a look out, and a new dog run. Phase II of the project is expected to be completed in March 2013, and will extend a narrow strip of land providing a separate bikeway and walkway to improve the north-south continuity of the Esplanade³³.



East River Waterfront Esplanade - New York City Economic Development Corporation

Figure 2.3.1

A People's Plan for the East River Waterfront (2010)

In 2007, a coalition of community-based organization and tenant associations representing residents of the Lower East Side and Chinatown, including: CAAV Organizing Asian Communities (WHAT DOES THE CAAV STAND FOR), the Urban Justice Center's Community Development Project (UJC), Good Old Lower East Side (GOLES), Jews for Racial and Economic Justice (FDREJ), Public Housing Residents of the Lower East Side (PHROLES), Hester Street Collaborative, the Lower East Side Ecology Center, Two Bridges Neighborhood Council and University Settlement, joined to form O.U.R. (Organizing and Uniting Residents to produce "*A People's Plan for the East River Waterfront.*")

This development plan used the community-based planning process, which included the collection of over 800 surveys, sessions with community members to identify the needs and vision of the waterfront, and town hall meetings. The development plan is characterized by green, open, and community space. The estimated cost of this plan is \$52,031,369.

Policy recommendations included:³⁴

- Management of the community space by a partnership between a non-profit local development corporation and the NYC Department of Parks and Recreation
- Transparent and publicly available documentation of financing
- The allocation of more funding to community boards to conduct outreach to individuals and groups in the community to develop a comprehensive and collective response to development plans
- The construction of a community and recreation center on Pier 42 or Pier 36
- Commercial uses should be consistent with the community's preference with a focus on small businesses with low cost goods and not high end large-scale commercial projects
- Modification of the basketball city lease to include provisions outlined in a community benefits agreement between Basketball City, Inc. and the community

- The EDC should examine the projected profits of Basketball City to determine how a portion of these profits could be utilized to support the maintenance and operation of community uses on the waterfront
- A Pier 36 Advisory Board comprised of private and public tenant associations should be formed to oversee a community benefits agreement between Basketball City and community entities



A People's Plan for the East River Waterfront

Figure 2.3.2

Vision 2020

In March 2011, the Department of City Planning in conjunction with the Mayor's Office released *Vision 2020*, a New York City Comprehensive Waterfront Plan, which includes the NYCEDC plans for the Chinatown/LES Waterfront discussed previously. The comprehensive plan is a ten-year vision and was accompanied by Waterfront Action Agenda, outlining 130 key projects to be initiated within three years. Goals of Vision 2020 include:³⁵

- Expand public access to the waterfront and waterways on public and private property for all New Yorkers and visitors alike
- Enliven the waterfront with a range of attractive uses integrated with adjacent upland communities
- Support economic development activity on the working waterfront
- Improve water quality through measures that benefit natural habitat, support public recreation, and enhance waterfront and upland communities
- Restore degraded natural waterfront areas and protect wetlands and shorefront habitats
- Enhance the public experience of the waterways that surround New York – our Blue Network
- Improve governmental regulation, coordination, and oversight of the waterfront and waterways
- Identify and pursue strategies to increase the city's resilience to climate change and sea level rise



INFRASTRUCTURE & TRANSPORTATION UTILITIES Public Transportation,
Transportation Alternatives, Public Safety, Infrastructure & Utilities,
Climate Risk & Environmental Justice

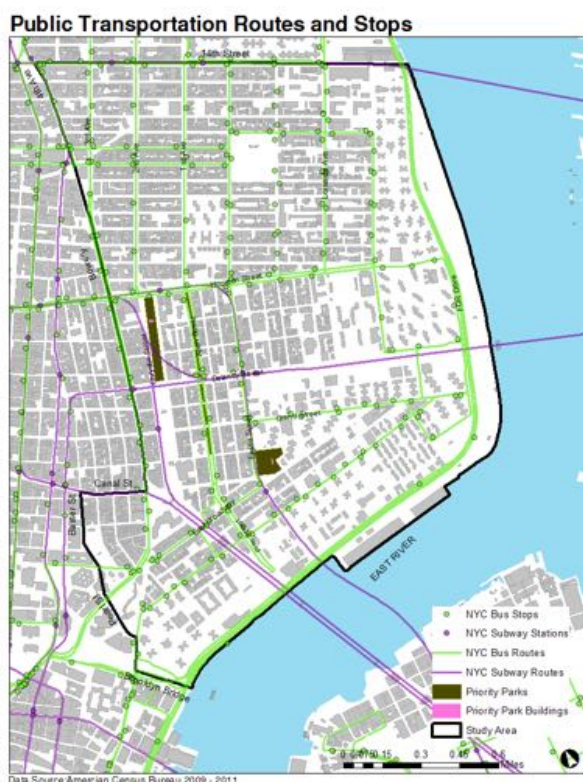
2.4 Infrastructure & Transportation Utilities

Community District Three is home to energy generation, wastewater runoff sites, heavy truck and hauling traffic routes as well as a number of food and beverage establishments. The combination of these utilities and their locations, frequently in close proximity to, public or low-income housing create potential health and safety issues for the residents of CD3. This section will highlight the several utilities located in CD3 and their effects on the neighborhood.

2.4.1 Transportation Infrastructure

According to Community Board Three's 2013 Fiscal Year Needs Report, "the most important transportation problem within Community Board 3's boundaries is the lack of adequate public transportation; however, inadequate public transportation is exacerbated by the intense traffic congestion on our streets."³⁶ However, as you will see in this section there are several different types of transportation running through CD 3. Through composed data and research, this section will provide a sufficient understanding about aspects concerning transportation in CD 3. These aspects include the lack of public transportation, heavy traffic caused by three connecting bridges, over usage of truck routes, casualties caused by traffic congestion, and pollution.

Bus Routes/Subway Stations/Routes





Source: NYC Department of Transportation

Figure 2.4.2

between New York and Boston, serving the New York Chinatown to Boston route for more than 10 years.⁴² The shutdown occurred when major safety defects were found by Massachusetts's regulators. The federal government revoked the company's license due to their noncooperation with inspectors and for blocking access to safety records. Fung Wah Bus was located between Bowery Street and Canal Street.

Truck Routes

Truck routes passing through CD3 are a major factor in traffic congestion accumulation in the district. Figure 2.4.2 shows the Williamsburg and Manhattan Bridges allow for the trucks to cut through the heart of the Lower East Side, making Delancey Street one of its most used thoroughfares.⁴⁰

Franklin Delano Roosevelt Drive becomes another highly congested pathway as trucks make their way up and down the waterfront. According to the Department of Transportation these routes have become the designated areas where trucks have access through Manhattan.⁴¹

Chinatown Buses

The Chinatown bus transit, Fung Wah Bus, was ordered to take its 28 buses off the road after severe safety problems. Fung Wah Bus, was the largest Chinatown bus service provider



Image 2.4.3

Source: Litvak, Ed. "State Regulators Inspect Chinatown Buses | The Lo-Down : News from the Lower East Side."

Traffic Casualties

With massive amounts of heavy traffic in CD3, primarily off Delancey Street, Allen Street, East Broadway, Bowery Street, and FDR Drive, accidents are bound to happen. The Department of Transportation has indicated these areas as Hot Spots, having Annual Average Daily Traffic (AADT) values between 23,000 to 145,000.⁴³ Thus, by being a highly congested area it becomes dangerous for pedestrians as well as cyclists. In Figure 2.4.4, one can see the high amount of incidents caused by traffic congestion.

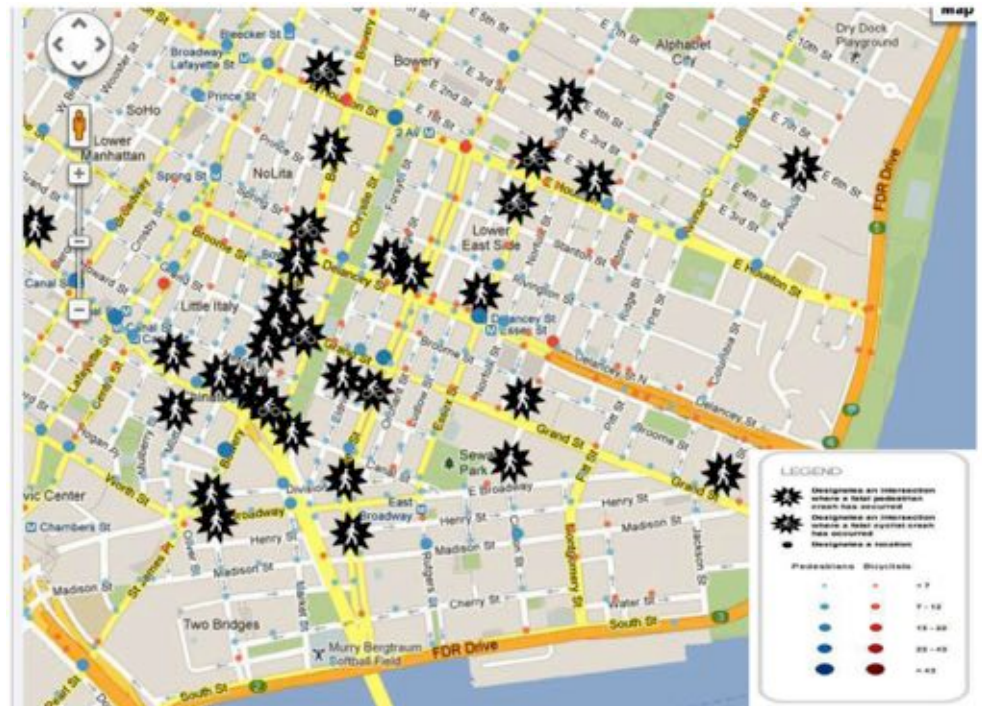


Figure 2.4.4 Source: CrashStat.org © 2003-2013

According to Crash Stat, the contributing factors to these casualties come from unsafe driving. These are factors such as:

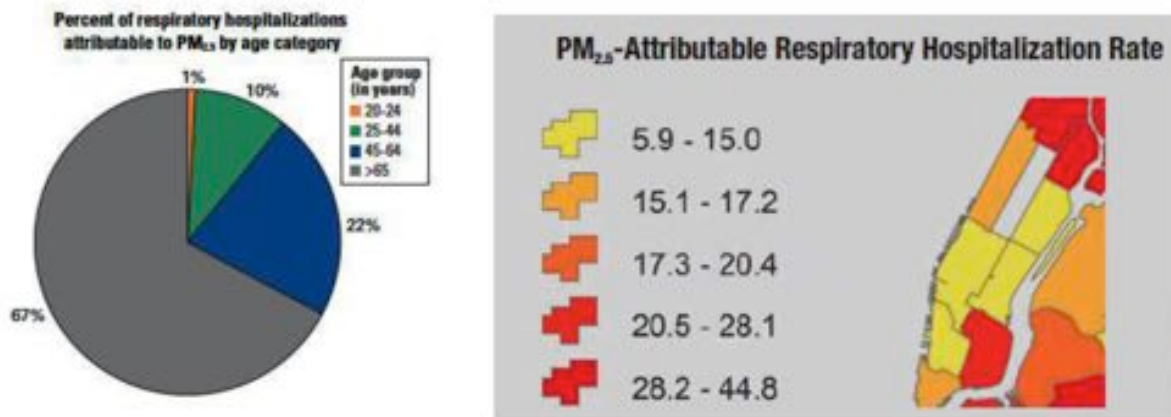
- Unsafe reversing
- Passing or lane usage improperly
- Traffic control disregarded
- Turning improperly
- Unsafe speed
- Aggressive driving/road rage
- Inattention/distraction

In as span of five years (2005-2009), as shown in figure 2.4.4, CD3 has seen everything from minor incidents to actual fatal incidents.⁴⁴ Numbers that are still rising today as traffic congestion grows in the Lower East Side.⁴⁵ Casualties are taking place, particularly, on intersections such as Essex St and Delancey, as well as up and down Bowery.

Pollution

As CD 3 traffic congestion grows, so does its contribution to pollution. As the high amount of vehicles make their way through the Lower East Side emissions from transportation escalate. Emissions from transportation, primarily cars, and trucks, contribute a significant amount of pollution to the air on a daily basis. Every year New York City motor vehicles contribute approximately 11% of the local PM2.5 (small pieces of liquid or solid matter related with the Earth's atmosphere) and 28% of the nitrogen oxide emissions.⁴⁶ Both PM2.5 (Particulate Matter) and nitrogen oxide, are known to lead to lung irritation (respiratory conditions) and have an effect on the formation of the ozone. In figure 2.4.6 one

can see the hospitalization rate these emissions bring and have brought to CD3. As figure 2.4.5 shows, CD3 has the highest, if not top three highest attributable respiratory hospitalization rates in New York City. Figure 3 shows the effect PM_{2.5} and nitrogen oxide emissions are having in New York City by age. The highest percentage being effected are seniors (above age 65) with 67%, followed by adults with age range between 45 and 64 with 22%.



Source: Air Pollution and Health of New Yorkers

Figures 2.4.5 and 2.4.6

Bike Lanes



Source: NYC Department of Transportation

Figures 2.4.7

In addition to the public transportation in CD 3 the area is home to several bike routes including Allen Street, the Williamsburg Bridge and the East River Esplanade as the main thoroughfares.⁴⁷ Figure 2.4.7 shows all of the bike lanes in CD 3.

The Allen Street Mall protected bike lanes began development in 2009 and opened for usage August 2012, however, but it appears funding has run out. According to NNN, currently the Department of Parks and Recreation or the Department of Transportation (DOT) are unable to finish the work on the Mall from Delancey to Houston Street.⁴⁸

Community District Three has a need for bike racks and additional bike parking. With the increase of bike lanes throughout New York City the demand for parking has risen. "The lack of adequate bike parking facilities is an impediment to bicycle usage and also results in bicycles chained to public street fixtures and obstruction of sidewalks."⁴⁹ However the DOT has

installed four bike corrals in CD 3 in the last few years. In December 2012 CB 3 voted in support of a bike corral in front of Teanyssimo Café at the intersection of Rivington and Orchard. In March 2013 the DOT proposed extending the corral in front of the neighboring storefront, Misrahi Realty.⁵⁰ The

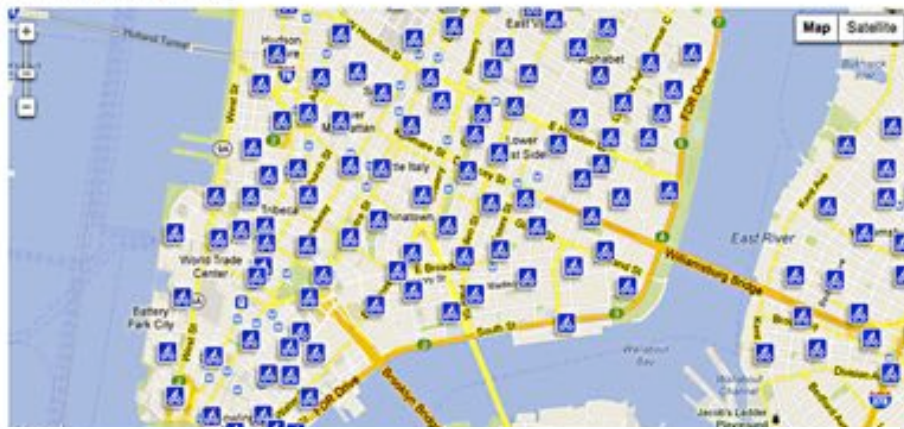
advocacy group, Transportation Alternatives, also has a list of all bike parking spaces located within parking garages in New York City.⁵¹



Bike Share

In May 2013 bike share is coming to Manhattan, Brooklyn and Queens. The Citibank and Mastercard sponsored program brings 600 stations and 10,000 bikes to New York City. Currently there is only a draft map of the station locations, but the draft shows at least 40 stations in the Lower East Site. Bikes will be available for rental through annual membership, 7 day and 24 hour passes.⁵² The bike share program could be a great asset

Draft Citi Bike Station Map



Source: New York City Department of Transportation

Figures 2.4.8

to the community if adequate education is given to residents of CD 3. If the bike share program does gain popularity throughout CD 3 changes to traffic safety and awareness must be implemented.

Infrastructure Utilities



Figure 2.4.9

2.4.2 Infrastructure Utilities

Community District Three houses several infrastructure utilities for the city of New York. Figure 2.4.9 shows the different types of infrastructure and their locations in CD 3. These utilities on the map will be discussed in detail in the following pages.

Wastewater Infrastructure

The City of New York has a Combined Sewer System (CSS). According to the NYS Department of Environmental Conservation a CSS is a sewer system “designed to collect storm water runoff, domestic sewage and industrial wastewater in the same pipe and bring it to the publicly owned treatment works facilities.”⁵³ New York has a series of regulators, interceptors, pumping stations and combined sewer overflows (CSOs) that make up the CSS.

Regulators are chambers built into the city's CSS that deliver two times the average design dry-

weather flow to the interceptor. This means that when there is excessive rain or wet weather the regulators prevent too much wastewater from going to the treatment plants. There are roughly 490 regulators in New York City. From the regulators the wastewater flows into the interceptors, which are large sewers that connect via the regulators to the treatment plants. They are designed to deliver two times design dry weather flows to the treatment plants.⁵⁴

In addition to the regulators and interceptors there are pumping stations throughout the city that control wastewater downstream flows in situations where gravity cannot. There are about 90 pumping stations in New York City, including a large station located at Avenue D and 13th Street in the CD 3. This pumping station is called the Avenue D or Manhattan Pump Station.



Figure 2-120: Combined Sewer Overflows (CSOs), Source: New York Department of Environmental Protection.

The wastewater from the study area eventually goes to Newton Creek Water Pollution Control Plant (WPCP) in Greenpoint, Brooklyn. However, in order to get there it must be pumped from the Manhattan Pumping Station. The pump station serves all of Lower Manhattan and the entire East Side of Manhattan, north to 71st St.⁵⁵, it provides Newton Creek WPCP 155 million gallons per day for treatment, this is over half the daily flow for the WPCP. The pump station was upgraded in the early 2000s with a large renovation lasting from January 2005-October 2011. The upgrade included five new motors, energy efficient variable frequency drives, new screening equipment and a full emergency power generation system as well as a new facade. As the pump station is adjacent to the Jacob Riis Houses (part of the NYCHA community) the community was also treated to resurfaced streets, more parking spaces and a park renovation during the upgrade period.⁵⁶

When there is extra rain or wet weather in New York City the CSS and water treatment plants

cannot handle all of the excess wastewater. Therefore, Combined Sewer Overflows (CSOs) are incorporated into the city's facilities. CSOs discharge the extra water runoff into various water bodies around greater New York City.⁵⁷ There are over 460 CSO outfalls in New York City and more than 27 billion gallons of raw sewage deposited into New York Harbor each year.⁵⁸

There are three tiers of Combined Sewer Overflows, each transporting a percentage of the total CSO outputs. As seen in Figure 1 Tier 3 carries the least amount of wastewater and there is one tier 3 CSO in CD3. According to Figure 2 there are over 30 CSOs in the study area.

According to the US Environmental Protection Agency sewer flow from CSOs⁵⁹ can cause several health concerns (Figure 2.4.11) to both the people and the water bodies near the runoff.

Pollutant(s)	Principle Consequences
Bacteria (e.g., fecal coliform, E. coli, enterococci)	Beach closures
Viruses (e.g., hepatitis, diphtheria, cholera)	Odors
Parasites (e.g., giardia, cryptosporidium)	Shellfish bed closures
	Drinking water contamination
	Adverse public health effects
Trash and floatables	Aesthetic impairment
	Odors
	Beach closures
Organic compounds, metals, oil, grease	Aquatic life impairment
Toxic pollutants	Adverse public health effects
	Fishing and shellfishing restrictions
Biochemical oxygen demand (BOD)	Reduced oxygen levels and fish kills
Solids deposition	Aquatic habitat impairment
	Shellfish bed closures
Nutrients (e.g., nitrogen, phosphorous)	Eutrophication, algal blooms
	Aesthetic impairment

Source: Modified from Approaches to Combined Sewer Overflow Program Development: A CSO Assessment Report (AMSA, 1994)

Table 2.1

CSO Pollutants of Concern and Principle Consequences

CSO discharges contain a variety of pollutants that cause or contribute to many public health and environmental problems.

Table 2.2

Figure 2.4.11: CSO Dangers Source: United States Environmental Protection Agency

On March 8, 2012 the New York State Department of Environmental Conservation (DEC) and the Department of Environmental Protection signed an agreement to reduce CSO usage using green and grey watershed and waste treatment plant will begin this development process third quarter of 2015 and finish the process fourth quarter 2017.⁶⁰ Until the project beings in 2015 the CSO’s in CB 3 will continue to have the same levels of output as they do today.

In conjunction with the agreement between the DEC and the DEP, New York produced the NYC Green Infrastructure Plan which lays out and highlights how wastewater run off and storm water levels can be curbed using various sustainable infrastructures. The Plan has five key components: build cost-effective grey infrastructure, optimize the existing wastewater system, control runoff from 10% of impervious surfaces through green infrastructure, institutionalize adaptive management, model impacts, measure CSOs, monitor water quality, and engage and enlist stakeholders.⁶¹

Solid Waste

“Every year, we (NYC) generate more than 14 million tons of waste and recyclables in our homes, businesses, schools, streets and construction sites. It takes a fleet of more than 2,000 City government and 4,000 private trucks to collect it all across the five boroughs.”⁶² Of those 14 million tons of waste and recycling CD 3 reports: Refuse: 3,178.24 tons of garbage, paper tons collected 388.52 of paper tons and MGP (metal, glass, plastic) tons collected 257.06.⁶³

The study area has self-identified having several solid waste issues, mostly focusing around weekend solid waste removal and rodent problems. “Community Board 3 has the lowest percentage of acceptably clean streets for Manhattan community boards as reported by the Department of Sanitation New York (DSNY) Scorecard.” In the Fiscal Year 2012 Community District Needs report

Community Board 3 expressed desires for weekend basket pick ups and new rat-resistant baskets.⁶⁴ In the 2013 community district needs report it appears that pick up has increased on weekends and that the city has started to replace some of the baskets with rat resistant receptacles. The main issues seem to have slightly switched from pick up frequencies to the serious over capacity waste and rats that are caused by the increase in nightlight throughout the Lower East Side. Community Board 3 stated that extra enforcement for garbage storage and removal by street vendors were needed as well as review and modification of vendor regulations to ensure vendors are meeting their waste requirements.⁶⁵

Again, for Fiscal Year 2014 Community District needs continued to site lack of rat proof baskets for waste, necessity of more frequent pick ups and more enforcement for vendors as the main concerns for the future.⁶⁶

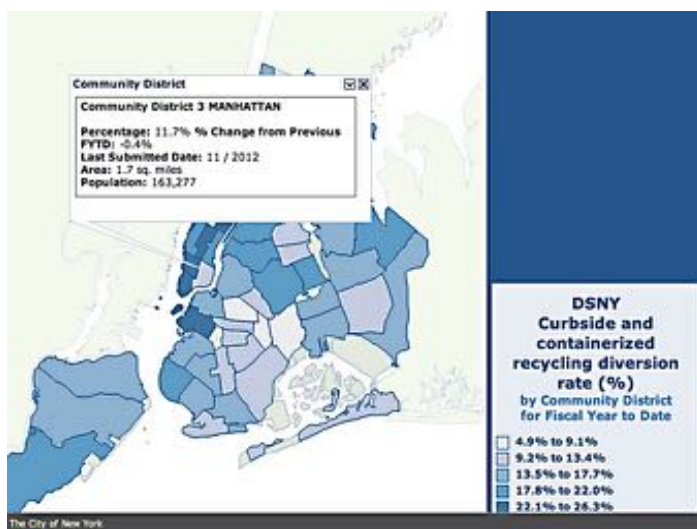


Figure 2.4.12 Source: NYC Mayor's Office of Operations.

The series of images found on the Mayor's Office of Operations Agency Performance Reporting shows the Lower East Side as having the extremely low levels of recycling and of acceptably clean streets and sidewalks.

There is one DSNY garage in the study area, located at South St. Pier 36 between Montgomery and Jefferson St. This garage is across the FDR from the NYCHA La Guardia and La Guardia Addition communities. The DSNY website shows each Manhattan Community District as having one garage within their boundaries, except for Manhattan Community Districts 4 and 5, they share an extra large garage at 2 Bloomfield St.⁶⁷

DSNY collects waste and recycling by truck and takes the materials to transfer stations where it is sorted into various rails, barges or larger trucks to be taken to the waste management facility.⁶⁸ There are no transfer station in the Lower East Side and the waste from the district goes to the Essex County Resource Recovery Facility in Newark, NJ.⁶⁹

Although there are no transfer stations located in the study site there are several long haul and local truck routes running across the community district. As illustrated in the transportation section of the report there are five major streets that allow truck traffic in the Lower East Side alone.

Private Haulers

In addition to the DSNY waste removal truck going through the Lower East Side there are private waste haulers. "Every commercial establishment in New York City is required by law to have its waste removed by a private carting company."⁷⁰ There are currently 2,000 private haulers and all must obtain a license or registration from the NYC Business Integrity Commission before they are able to work. These trucks add to the amount truck traffic through the Lower East Side. There was also an

instance of a private hauler injuring a resident of Community District 3. The driver apparently fell asleep at the wheel injuring one woman and damaging several parked cars on Delancey Street. Given that Delancey is a major truck route (as cited in Figure Nine) this accident could have been much worse than it already was.⁷¹

Energy Generation

Community District Three is also home to a Con Ed power plant between East 13th and 14th Street along Avenue C. This power plant is located extremely close to the Manhattan Pumping Station, the Jacob Riis Houses and the Stuyvesant Town. The plant consists of a combination of two sites. One manufactured gas site at 14th and Avenue C and the newly renovated steam powered East River Generation Station at 13th and Avenue C that re-opened April 5, 2005 after renovations. The site now houses two state of the art natural gas fired generators that provide power to NYC. When operating at full capacity it produces 350 megawatts of electricity. The generating station burns natural gas all the time and uses up to date emissions controls. According to Con Ed the East River site is one of the cleanest power sites in New York.⁷²

Sandy's Impact on Infrastructure Utilities

Hurricane Sandy had detrimental effects to all of NYC and the Lower East Side was not spared any damages. More specifically the infrastructure in the study area was some of the hardest hit, including the Manhattan Pumping Station and Con Ed's plant. During the hurricane the Manhattan Pumping station was the hardest hit of all the pumping stations in the city.⁷³ A report by the Department of Environmental Protection, Impacts of Hurricane Sandy to NYC Department of Environmental Protection Waste Water Treatment Plants and Pump Stations, "the trident actuator controlling influent gate #2 was partially submerged by storm water and gate #2 was out of service. The control panel for influent gate #2 was damaged by storm water. It has to be relocated to higher than ground level."⁷⁴ The renovations that occurred to the Manhattan Pumping station from 2005-2008 were flooded and in some cases destroyed due to the flooding from Sandy.

During the flooding residents of the Jacob Riis Houses and surrounding NYCHA buildings reported several toilets unable to flush and a lack of running water. There were also issues of floodwaters that contained garbage, wood from docks, and possibly sewage.⁷⁵ An investigation done by ABC News found the floodwaters of lower Manhattan contaminated with gasoline, E. coli and coliform.⁷⁶

The Con Ed East 13th Street Substation was built to withstand 12.5 foot storm surge. However, the site was hit with a 14 foot surge during Hurricane Sandy. The impact caused a short circuit, an explosion and left over 220,000 people without electricity. The power outages lasted for a range of time depending on customers lived.⁷⁷

2.5 Hurricane Sandy & Climate Impact

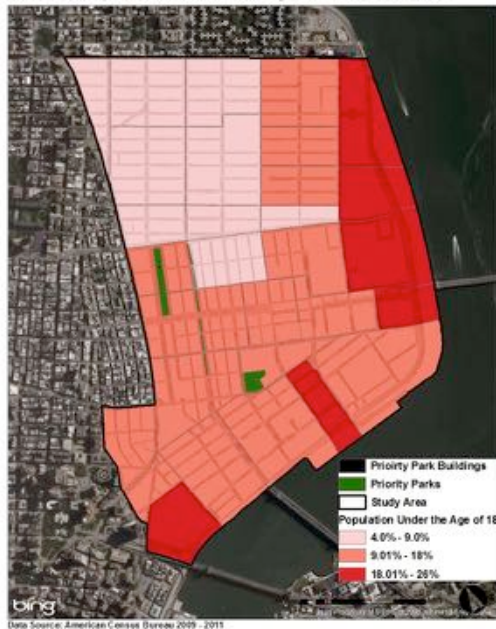
Hurricane Sandy

In October 2012 Hurricane Sandy hit New York City. At the time of landfall, the storm was reduced to a category 1 post-tropical cyclone. Yet, its impacts on New York City and its surrounding suburbs were

severe. Sandy's impacts included the flooding of the New York City Subway system, many suburban communities, numerous road tunnels, and the closure of the New York Stock Exchange for two consecutive days. Further numerous homes were destroyed and large parts of the city and surrounding area lost electricity for several days. Economic losses across New York were estimated to be at least \$18 billion.⁷⁸

Storm surge is the abnormal rise of water generated by a storm and is primarily caused by the strong winds in a hurricane or tropical storm. Storm surge is often the greatest threat to life and property during a hurricane.⁷⁹ Category 1

Percent Population Under the Age of 18 in CD MN-3



Percent Population Over the age of 65 in CD MN-3



Figure 2.5.1 and Figure 2.5.2

hurricanes can

Hurricane Storm Surge and Affordable & Public Housing



Hurricane Storm Surge Zones and Evacuation Centers



Figure 2.5.3 and Figure 2.5.4

produce wind speeds from 74-95mph and a storm surge of 4-5 ft; Category 2, 96-110mph and 6-8ft; Category 3, 111-130mph and 9-12ft; and Category 4, wind speeds of 131-155mph and a storm surge of 13-18ft.⁸⁰

Community District 3 has both its concentration of residents under the age of 18 and over the age of 65 in storm surge zones along the East River Waterfront. In CD3 there is only one evacuation center, located at Seward Park High School. Additionally many medical centers lie within storm surge zones (see Chapter 1). The major hospital in CD 3, along the northern border, lies just outside of Storm Surge Zone 4. Additionally, it is important to note the southeastern portion of Seward Park lies within Storm Surge Zone 4.

Climate

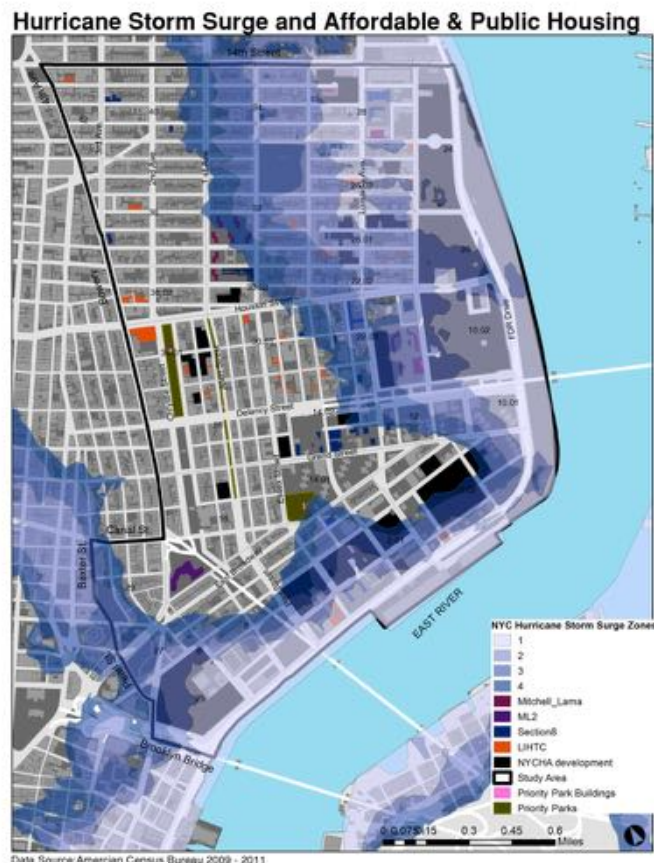


Figure 2.5.5



Image 2.5.6

Large portions of public and subsidized housing are concentrated in storm surge zones along the east river. As discussed previously in the demographic portion of this report, these areas that also coincide with high concentrations of seniors, youth, and immigrant communities, presenting a potential environmental justice issue. Additionally, the flooding of residential properties caused by Sandy created the potential for long-term exposure to mold.

2.6 Land Use, Zoning, and Urban Design, Parks, Open Space System, and Green Infrastructure, Disaster Risk and Environmental Justice SWOT Analysis

Strength

- East River Esplanade Phases 1 & 2 completion by the NYC Economic Development Corporation
- Reinstated bus routes through LES in January 2013 (back the B39, M9 and M21)
- Contextual East Village/Lower East Side rezoning of 2008 (moved to increase residential use and decrease commercial use)
- Seward Park Mixed Used Development Project by the NYC Economic Development Corporation
- High concentration of registered landmarks and history districts in CD3
- 63 acres of open space at the water front

Weaknesses

- East River Esplanade as a non inclusive planning
- Open space to population ratio is below state standards; required ratio is 2.5 acres to every 1,000 people. The ratio in CD3 is nearly 0.7 acres per 1,000 people.
- Newly constructed Con Ed power plant has storm surge walls are not high enough ineffective built at 12.5 feet, and surge waves from Sandy were 14 feet high
- Stanton Street Building houses Parks and Recreation equipment for entire city and lacks of good maintenance
- Contextual East Village/Lower East Side rezoning of 2008 (also favored new developments)

Opportunities

- 1281 potentially developable acres as well as the 44 acres of vacant land
- Green Infrastructure Plan, which lays out and highlights how wastewater run off and storm water levels can be curbed using various sustainable infrastructure.
- Bike Share in May 2013, brings 600 stations and 10,000 bikes to NYC

Threats

- 1281 potentially developable acres (as most of them are in the public housing lots)
- Sidewalks in disrepair, have been found in poor condition according the Community District Needs for Fiscal year 2013
- Excess of garbage throughout streets, there is no convenient & comprehensive recycling program
- The crisis in affordable housing, which according the Community District 3 Fiscal Year 2013 continues to worsen
- Over developed FAR for indicators until 62 when 10 is the maximum available
- Mold as result of Hurricane Sandy flooding
- Truck routes through Lower East Side add to traffic pollution and congestion

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- ¹ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 8-12. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ² **NYC Department of City Planning** (2013) *Zoning Districts*, <http://www.nyc.gov/html/dcp/html/zone/zonehis2.shtml>
- ³ **NYC Department of City Planning** (2013) *Zoning Districts*, <http://www.nyc.gov/html/dcp/html/zone/zonehis2.shtml>
- ⁴ **NYC Department of City Planning** (2013) *Zoning Districts*, <http://www.nyc.gov/html/dcp/html/zone/zonehis2.shtml>
- ⁵ **NYC Department of City Planning** (2013), *Zoning Glossary* <http://www.nyc.gov/html/dcp/html/zone/glossary.shtml>
- ⁶ **NYC Department of City Planning** (2013) *Zoning Districts*, <http://www.nyc.gov/html/dcp/html/zone/zonehis2.shtml>
- ⁷ **NYC Department of City Planning** (2013), *Zoning Glossary* <http://www.nyc.gov/html/dcp/html/zone/glossary.shtml>
- ⁸ **NYC Department of City Planning** (2013), *Zoning Tools, Inclusionary Housing*, http://www.nyc.gov/html/dcp/html/zone/zh_inclu_housing.shtml
- ⁹ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 2: Land Use, Zoning and Public Policy. P. 33-34, Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ¹⁰ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 2: Land Use, Zoning and Public Policy. P. 33-34, Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ¹¹ **NYC Department of City Planning**, *Statement by Mayor Bloomberg and City Planning Commissioner Burden on the City Council's adoption of the East Village and Lower East Side Rezoning Plan*. Retrieved from: <http://www.nyc.gov/html/dcp/html/about/pr111908.shtml>
- ¹² **New York City Economic Development Corporation** (2013), *Seward Park Mixed-Use Development Project*, Retrieved from: <http://www.nycedc.com/project/seward-park-mixed-use-development-project>
- ¹³ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 2-3. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ¹⁴ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 2-3. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ¹⁵ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 2-3. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ¹⁶ **Asian Americans for Equality**, *Rebuild Chinatown Initiative Plan for America's Chinatown*, P. 1

-
- ¹⁷ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 8-11. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ¹⁸ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 8-11. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ¹⁹ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 8-11. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ²⁰ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 8-11. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ²¹ **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 8-11. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ²² **NYC Department of City Planning** (September 26, 2008), *East Village / Lower East Side Rezoning, Final Environmental Impact Statement*, Chapter 8: Urban Design, p. 8-19. Retrieved from: http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ²³ **Landmarks and Historic District, Mayor's Office of Operations / CPR Performance Mapping Report** <http://gis.nyc.gov/doitt/nycstat/index.htm?indicatorName=Curbside%20and%20containerized%20recycling%20diversion%20rate%20%28%25%29&goUrl=http://a858-anltw.nyc.gov/analytics/saw.dll?Go&lastSubmittedMonth=11%20/%202012&agency=DSNY&citywide=14.9%25&indicatorId=1385>
- ²⁴ **Community District Needs for Fiscal Year 2013 for the Borough of Manhattan.** (Department of City Planning, 2012). 63-89. Retrieved from: http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf#mn03.
- ²⁵ **East Village/Lower East Side Rezoning Final Environmental Impact Statement.** Volume 1, Chapter 5. http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ²⁶ **CEQR Technical Manual.** (Mayor's Office Of Environmental Coordination, 2012). 7-1-7-2. <http://www.nyc.gov/html/oec/html/ceqr/ceqr.shtml>
- ²⁷ **East Village/Lower East Side Rezoning Final Environmental Impact Statement.** Volume 1, Chapter 5. http://www.nyc.gov/html/dcp/html/env_review/evles.shtml
- ²⁸ **Community District Needs for Fiscal Year 2013 for the Borough of Manhattan.** (Department of City Planning, 2012). 63-89. Retrieved from: http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf#mn03
- ²⁹ (Lower Manhattan Construction Command Center, n.d.). Retrieved from: http://www.lowermanhattan.info/construction/project_updates/houston_street_reconstruction_14688.aspx
- ³⁰ **"The Green Infrastructure Plan."** *NYC Green Infrastructure Plan*. 2010. Reprint. New York City: New York City Department of Environmental Protection, 2011. http://www.nyc.gov/html/dep/html/stormwater/nyc_green_infrastructure_plan.shtml.
- ³¹ **New York City.** "2013 Green Infrastructure Grant Program Combined Sewer Area Reference Map." *Using Green Infrastructure to Manage Stormwater*. NYC Department of Environmental Protection, n.d. Web. 26 Mar. 2013.

<www.nyc.gov/html/dep/pdf/green_infrastructure/2013_gi_grant_reference_map.pdf>.

- ³² **Equality, A. A.** (2004). America's Chinatown: A Community Plan.
- ³³ **Corp., N. Y.** (2013, February 7). East River Waterfront Esplanade. Retrieved February 15, 2013, from NYCEDC: <http://www.nycedc.com/project/east-river-waterfront-esplanade>
- ³⁴ **Coalition, O. W.** (2010). Publications. Retrieved February 15, 2013, from CAAAV Organizing Asian Communities: <http://caaav.org/publications/PeoplePlanFINAL.pdf>
- ³⁵ **NYC Department of City Planning.** NYC Department of City Planning, (2011). Vision 2020: New York City comprehensive waterfront plan. Retrieved from website: http://www.nyc.gov/html/dcp/pdf/cwp/vision2020_nyc_cwp.pdf
- ³⁶ **New York City Department of City Planning.** (2013). *Community District Needs*. 82. Retrieved from: http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf
- ³⁷ **Metropolitan Transit Authority.** (2013, January). *Manhattan Bus Routes*. Retrieved from: <http://www.mta.info/nyct/maps/manbus.pdf>
- ³⁸ **WYNC.** (2012, July 19). *MTA Restores Some Cuts, Adds Bus Routes*. Retrieved from: <http://www.wnyc.org/blogs/wnyc-news-blog/2012/jul/19/mta-service-expansion-restoration-planned-manhattan-and-brooklyn/>
- ³⁹ **Metropolitan Transit Authority.** (2012). *Second Avenue Subway Background*. Retrieved from: <http://www.mta.info/capconstr/sas/description.html>
- ⁴⁰ **Truck Routing.** (n.d.). *NYC.gov Always Open*. Retrieved March 21, 2013, from www.nyc.gov/html/dot/html/motorist/truckrouting.shtml
- ⁴¹ **Truck Routing.** (n.d.). *NYC.gov Always Open*. Retrieved March 21, 2013, from www.nyc.gov/html/dot/html/motorist/truckrouting.shtml
- ⁴² **Litvak, Ed.** "State Regulators Inspect Chinatown Buses | The Lo-Down : News from the Lower East Side." *The Lo-Down : News from the Lower East Side*. N.p., n.d. Web. 7 Mar. 2013.
- ⁴³ **Traffic Data Viewer.** (n.d.). *Department of Transportation New York*. Retrieved March 21, 2013, from <https://www.dot.ny.gov/tdv>
- ⁴⁴ **Welcome to CrashStat.** (n.d.). *Welcome to CrashStat*. Transportation Alternatives. Retrieved February 22, 2013, from [http://crashstat.org/crashsolr/search?filters=is_case_yr:\(%222005%22OR%222006%22OR%222007%22OR%222008%22OR%222009%22\);](http://crashstat.org/crashsolr/search?filters=is_case_yr:(%222005%22OR%222006%22OR%222007%22OR%222008%22OR%222009%22);)
- ⁴⁵ **Resources | Transportation Alternatives .** (n.d.). *homepage | Transportation Alternatives .* Retrieved March 21, 2013, from <http://transalt.org/resources>
- ⁴⁶ **Emissions From Transportation.** (n.d.). *NYC.gov Always Open*. Retrieved February 22, 2013, from www.nyc.gov/html/dep/html/air/emissions_from_transportation
- ⁴⁷ **New York City Department of Transportation.** (2012). *Full 2012 NYC Cycling Map*. Retrieved from: http://www.nyc.gov/html/dot/downloads/pdf/2012_nyc-cycling-map.pdf
- ⁴⁸ **Litvak, Ed.** (2010, June 11). No Funds to Finish Allen Street Mall Project. *The Lo-Down*. Retrieved from: <http://www.thelodownny.com/leslog/2010/06/no-funds-to-finish-allen-street-mall-project.html#more-12315>

-
- 49 **New York City Department of City Planning.** (2013). *Community District Needs*.83. Retrieved from: http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf
- 50 **New York City Department of Transportation.** (2013, March 12). *Proposed Bike Corral, Teanyssimo – 88-90 Rivington Street, Manhattan*. Retrieved from: <http://www.nyc.gov/html/dot/downloads/pdf/2013-03-bike-corral-teanyssimo-man-cb3.pdf>
- 51 **Transportation Alternatives.** (2013). *NYC Garages with Bicycle Parking*. Retrieved from: <http://www.transalt.org/resources/garages>
- 52 **Alta Bicycle Share, Inc.** (2011) *Citibike NYC*. Retrieved from:<http://citibikenyc.com/>
- 53 **New York State Department of Environmental Conservation.** (2013). *Combined Sewer Overflow*. Retrieved from: <http://www.dec.ny.gov/chemical/48595.html>
- 54 **Mayor's Office of Environmental Coordination.** (2012, June 18). *City Environmental Quality Review*. Chapter 13. Retrieved from: http://www.nyc.gov/html/oec/html/ceqr/technical_manual_2012.shtml
- 55 **Smith, Robert.** (n.d). *Manhattan Pump Station: Sustainable Upgrades*. Retrieved from: <http://www.hazenandsawyer.com/work/projects/manhattanpumpstation/>
- 56 **New York City Department of Environmental Protection.** (2013). *Manhattan Pump Station Upgrade*. Retrieved from:http://www.nyc.gov/html/dep/html/dep_projects/cp_manhattan_pump_station.shtml
- 57 **New York State Department of Environmental Conservation.** (2013). *Combined Sewer Overflow*. Retrieved from: <http://www.dec.ny.gov/chemical/48595.html>
- 58 **Riverkeeper.** (2013). *Combined Sewer Overflows (CSOs)*. Retrieved from: <http://www.riverkeeper.org/campaigns/stop-polluters/sewage-contamination/cso/>
- 59 **U.S. Environmental Protection Agency.** (2001). *Report to Congress: Implementation and Enforcement of the CSO Control Policy*. EPA 833-R-01-003, U.S. Environmental Protection Agency, Washington, DC.
- 60 **New York Department of Environmental Protection.** (2013). *Long Term Control Plan Frequently Asked Questions*. Retrived from: http://www.nyc.gov/html/dep/pdf/cso_long_term_control_plan/ltcp_faqs_handout.pdf
- 61 **New York Department of Environmental Protection.** (2010) *NYC Green Infrastructure Plan* 3-6. Retrieved from: http://www.nyc.gov/html/dep/pdf/green_infrastructure/NYCGreenInfrastructurePlan_LowRes.pdf
- 62 **New York City's Office of Long Term Planning and Sustainability (OLTPS).** (2011). *PlanNYC*. Chapter on Solid Waste. Retrieved from: http://nytelecom.vo.llnwd.net/o15/agencies/planyc2030/pdf/planyc_2011_solid_waste.pdf
- 63 **New York City Open Data.** (2013). *DSNY-EM*. Retrieved from: <https://data.cityofnewyork.us/Environmental-Sustainability/dsny-em/pw3x-4f5b#end>
- 64 **New York City Department of City Planning.** (2012). *Community District Needs*.79. Retrieved from: http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2012.pdf
- 65 **New York City Department of City Planning.** (2013). *Community District Needs*.82. Retrieved from: http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf
- 66 **The City of New York Manhattan Community Board 3.** (2013). *FY 2014 District Needs Statement*.12. Retrieved from: http://www.nyc.gov/html/mancb3/downloads/cb3docs/fy_2014_needs_statement.pdf

-
- 67 **The City of New York Department of Sanitation.** (2013). *Garage Locations*. Retrieved from: <http://www.nyc.gov/html/dsny/html/about/garage.shtml#.USWcFkrWgug>
- 68 **New York City Department of City Planning.** (2008, August 13). *East Village/Lower East Side Final Environmental Impact Statement*.14-2. Retrieved from: http://www.nyc.gov/html/dcp/pdf/env_review/evles/14_feis.pdf
- 69 **The City of New York Department of Sanitation.** (2005). *Comprehensive Solid Waste Management Plan*. 3-2. <http://www.nyc.gov/html/dsny/downloads/pdf/swmp/swmp/swmp-4oct/chapter3.pdf>
- 70 **New York City Business Integrity Commission.** (2013). *Trade Waste*. Retrieved from: http://www.nyc.gov/html/bic/html/trade_waste/trade_waste.shtml
- 71 **Bookman, Sandra.** (2012, April 24). *Garbage Truck Leaves Path of Destruction*. Retrieved from: http://abclocal.go.com/wabc/story?section=news/local/new_york&id=8633526
- 72 **ConEdison.** (2013). *East River Repowering Project*. Retrieved from: http://www.coned.com/publicissues/east_river_repowering_project.asp
- 73 **Strickland Jr., Carter H.** (2013, January 16). *Prepared Testimony*. Testimony before the the New York State Assembly Committee on Environmental Conservation. Retrieved February 18, 2013 from: http://www.nyc.gov/html/dep/html/testimony/extreme_weather_testimony_01162013.shtml
- 74 **New York City Department of Environmental Protection.** (2012, December 12). *Impacts of Hurricane Sandy to NYCDEP WWTPs and Pump Stations*.10. Retrieved from: http://www.harborestuary.org/ppt/Sandy/KMahoney_sandy.pdf
- 75 **Robbins, Christopher.** (2012, October 13). Outrage in the Powerless Zone: A Dispatch from Downtown Manhattan. *Gothamist*. Retrieved from: http://gothamist.com/2012/10/31/outrage_in_the_powerless_zone_a_dis.php
- 76 **Lupkin, Sydney; Koenigs, Michael & Besser, Richard.** (2012, October 13). Sewage, Bacteria, Gasoline Found in NYC Floodwater. *ABC News*. Retrieved from: <http://abcnews.go.com/blogs/health/2012/10/31/sewage-bacteria-gasoline-found-in-nyc-floodwater/>
- 77 **Waxman, Olivia.** (2012, November 2). *Why Restoring New York's Power Isn't Easy: The Trouble with Salt*. Retrieved from: <http://nation.time.com/2012/11/02/why-restoring-new-yorks-power-isnt-easy-the-trouble-with-salt/>
- 78 **Times, T. N.** (2012, November 12). Hurricane Sandy: Covering the Storm.
- 80 **Center, N. H.** (2013). Introduction to Storm Surge. Retrieved from National Weather Service National Hurricane Center: http://www.nhc.noaa.gov/ssurge/surge_intro.pdf

2 A Table list of owners of Vacant Lots

VACANT LOTS OWNERSHIP					
Block	Lot	ZipCode	Address	OwnerType	OwnerName
422	65	10002	ELDRIDGE STREET	City Ownership	BOARD OF EDUCATION
372	11	10009	276 EAST 3 STREET	City Ownership	HOUSING PRESERVATION
386	22	10009	272 EAST 4 STREET	City Ownership	PARKS AND RECREATION
401	31	10009	EAST 6 STREET	City Ownership	PARKS AND RECREATION
398	27	10009	194 EAST 3 STREET	City Ownership	PARKS AND RECREATION
374	64	10009	EAST 4 STREET	City Ownership	PARKS AND RECREATION
374	62	10009	EAST 4 STREET	City Ownership	PARKS AND RECREATION
282	4	10002	HENRY STREET	City Ownership	DEPT OF TRANSPORTATIO
374	15	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
374	14	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
374	10	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
374	12	10009	706 EAST 5 STREET	City Ownership	PARKS AND RECREATION
398	28	10009	196 EAST 3 STREET	City Ownership	PARKS AND RECREATION
391	23	10009	EAST 9 STREET	City Ownership	PARKS AND RECREATION
405	44	10009	537 EAST 11 STREET	City Ownership	HOUSING PRESERVATION
374	17	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
386	60	10009	221 EAST 3 STREET	City Ownership	PARKS AND RECREATION
108	4	10038	SOUTH STREET	City Ownership	DEPT OF TRANSPORTATIO
374	16	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
282	34	10002	85 EAST BROADWAY	City Ownership	DEPT OF TRANSPORTATIO
240	6	10002	SOUTH STREET	City Ownership	DEPARTMENT OF BUSINES
387	40	10009	53 AVENUE C	City Ownership	PARKS AND RECREATION
374	13	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
405	30	10009	194 AVENUE B	City Ownership	PARKS AND RECREATION
344	153	10002	STANTON STREET	City Ownership	HOUSING PRESERVATION
406	38	10009	198 AVENUE B	City Ownership	PARKS AND RECREATION
390	46	10009	215 EAST 7 STREET	City Ownership	PARKS AND RECREATION
386	52	10009	237 EAST 3 STREET	City Ownership	PARKS AND RECREATION
241	10	10004	34 SOUTH STREET	City Ownership	DEPARTMENT OF BUSINES
385	11	10009	212 EAST 3 STREET	City Ownership	PARKS AND RECREATION
386	21	10009	270 EAST 4 STREET	City Ownership	PARKS AND RECREATION
275	2	10002	127 MADISON STREET	City Ownership	DEPT OF TRANSPORTATIO
401	37	10009	84 AVENUE B	City Ownership	PARKS AND RECREATION
385	51	10009	238 EAST 2 STREET	City Ownership	PARKS AND RECREATION
415	1	10002	154 ELDRIDGE STREET	City Ownership	DEPT OF ENVIRONMENTAL
409	56	10002	236 BROOME STREET	City Ownership	DEPT OF TRANSPORTATIO
373	26	10009	346 EAST 4 STREET	City Ownership	PARKS AND RECREATION
397	28	10009	EAST 2 STREET	City Ownership	PARKS AND RECREATION
354	18	10002	NORFOLK STREET	City Ownership	HOUSING PRESERVATION
439	10	10009	404 EAST 12 STREET	City Ownership	BOARD OF EDUCATION
374	60	10009	EAST 4 STREET	City Ownership	PARKS AND RECREATION
391	54	10009	311 EAST 8 STREET	City Ownership	PARKS AND RECREATION
405	45	10009	EAST 11 STREET	City Ownership	HOUSING PRESERVATION
387	121	10009	EAST 6 STREET	City Ownership	PARKS AND RECREATION
385	52	10009	236 EAST 2 STREET	City Ownership	PARKS AND RECREATION
391	43	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION

VACANT LOTS OWNERSHIP

Block	Lot	ZipCode	Address	OwnerType	OwnerName
406	16	10009	520 EAST 13 STREET	City Ownership	PARKS AND RECREATION
384	28	10009	EAST 2 STREET	City Ownership	PARKS AND RECREATION
73	28	0	MARGINAL STREET	City Ownership	DEPARTMENT OF BUSINES
406	37	10009	200 AVENUE B	City Ownership	PARKS AND RECREATION
374	18	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
387	122	10009	EAST 6 STREET	City Ownership	PARKS AND RECREATION
437	4	10009	154 1 AVENUE	City Ownership	CULTURAL AFFAIRS
401	33	10009	90 AVENUE B	City Ownership	PARKS AND RECREATION
401	39	10009	AVENUE B	City Ownership	PARKS AND RECREATION
379	59	10009	709 EAST 9 STREET	City Ownership	PARKS AND RECREATION
374	59	10009	EAST 4 STREET	City Ownership	PARKS AND RECREATION
401	25	10009	EAST 6 STREET	City Ownership	PARKS AND RECREATION
377	25	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION
391	42	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION
344	158	10002	ATTORNEY STREET	City Ownership	HOUSING PRESERVATION
391	24	10009	EAST 9 STREET	City Ownership	PARKS AND RECREATION
387	155	10009	EAST 5 STREET	City Ownership	PARKS AND RECREATION
379	5	10009	152 AVENUE C	City Ownership	PARKS AND RECREATION
406	46	10009	537 EAST 12 STREET	City Ownership	PARKS AND RECREATION
289	50	10002	FORSYTH STREET	City Ownership	DEPT OF TRANSPORTATIO
354	16	10002	STANTON STREET	City Ownership	HOUSING PRESERVATION
240	30	10002	SOUTH STREET	City Ownership	DEPARTMENT OF BUSINES
405	29	10009	544 EAST 12 STREET	City Ownership	PARKS AND RECREATION
406	17	10009	522 EAST 13 STREET	City Ownership	PARKS AND RECREATION
443	53	10003	48 EAST 1 STREET	City Ownership	PARKS AND RECREATION
401	35	10009	86 AVENUE B	City Ownership	PARKS AND RECREATION
379	3	10009	AVENUE C	City Ownership	PARKS AND RECREATION
379	2	10009	AVENUE C	City Ownership	PARKS AND RECREATION
377	24	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION
377	22	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION
373	30	10009	EAST 4 STREET	City Ownership	PARKS AND RECREATION
373	27	10009	EAST 4 STREET	City Ownership	PARKS AND RECREATION
393	20	10009	EAST 11 STREET	City Ownership	PARKS AND RECREATION
391	30	10009	143 AVENUE C	City Ownership	PARKS AND RECREATION
377	14	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION
379	4	10009	AVENUE C	City Ownership	PARKS AND RECREATION
379	6	10009	154 AVENUE C	City Ownership	PARKS AND RECREATION
377	20	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION
379	61	10009	EAST 9 STREET	City Ownership	PARKS AND RECREATION
394	29	10009	EAST 12 STREET	City Ownership	PARKS AND RECREATION
323	101	10002	DELANCEY STREET	City Ownership	DCAS
377	18	10009	EAST 8 STREET	City Ownership	PARKS AND RECREATION
379	1	10009	AVENUE C	City Ownership	PARKS AND RECREATION
395	8	10009	209 AVENUE B	City Ownership	PARKS AND RECREATION
377	69	10009	237 EAST 7 STREET	City Ownership	PARKS AND RECREATION
379	7	10009	156 AVENUE C	City Ownership	PARKS AND RECREATION

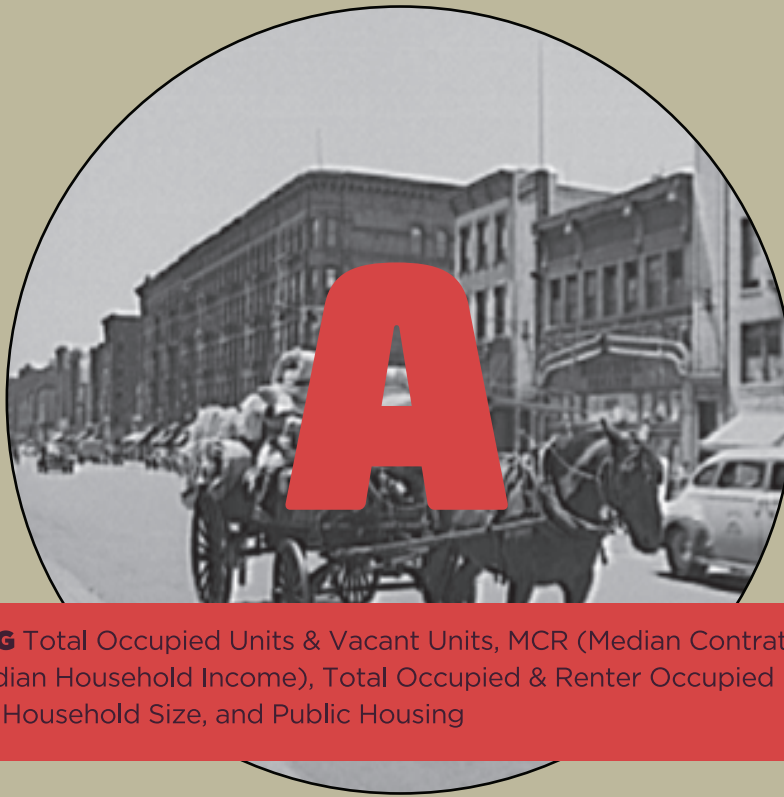
VACANT LOTS OWNERSHIP					
Block	Lot	ZipCode	Address	OwnerType	OwnerName
379	63	10009	EAST 9 STREET	City Ownership	PARKS AND RECREATION
389	40	10009	EAST 6 STREET	Other	NEW YORK CITY HOUSING
389	41	10009	639 EAST 6 STREET	Other	NEW YORK CITY HOUSING

Data Source: NYC Department of City Planning, PLUTO database 21012

3

3A Housing **3B** Economic Development

ELANA BULMAN,
PAOLA DURAN &
JASON HERNANDEZ



HOUSING Total Occupied Units & Vacant Units, MCR (Median Contratc Rent) & MHI (Median Household Income), Total Occupied & Renter Occupied Units, Average Household Size, and Public Housing

Chapter 3- Housing and Economic Development

In the last couple decades, Community District 3's housing network and local economy have undergone some very significant changes, as the area has become a premier nightlife destination. This section examines the current makeup of the community's housing stock and residents, as well as its economy and workforce, and how the demographics have changed in recent decades. It presents several trends in the housing system and economic development of the neighborhood, which inform the opportunities for ensuring that the housing stock is stable and the local economy meets the needs of its residents.

3.1 Housing



Figure: 3.1.1 La Guardia Houses

The study area's existing housing conditions will be presented in this section. The data collected will provide a clear scenario about housing tenure, size, types of housing, householders' income in comparison to housing rent, and the number of existing public and private housing units.

In the last two decades, CD 3 has been affected by increasing gentrification. According to the CD3 Fiscal Year 2013 Community Needs Report, the area has been changing in terms of a growing economic market, which directly affects current residents.¹ Community District 3 has the lowest median household income in lower Manhattan. While rent is significantly increasing, income is not growing at the same rate. The median household income in CD 3 is \$43,518, while Manhattan's median household income is \$63,706. In addition, 48% of apartments in CD 3 are rent-regulated, which is the third lowest percentage out of all the community districts in Manhattan.² However, CD 3 has a high concentration of public housing, which keeps the neighborhood mixed-income and prevents gentrification from occurring as rapidly.

3.1.1. Occupancy and Tenure

In 2010, CD3 had a total of 75,975 occupied units. There were 3,876 vacant units in CD3, which represents 5% of the total units. In contrast, 13.9% of units are vacant in Manhattan and 10.3% are vacant in New York City. Between 2000 and 2010, the number of rental units increased by 1.8% while ownership increased by 17.3%. In 2010, 86.4% of the units in CD 3 were renter occupied and 13.6% of the units were owner occupied³. This tendency is clearly related to the increasing gentrification in the area. In 2010, 48% of the total occupied units in CD3 were rent regulated in contrast with 59% of units rent regulated in Manhattan.

Total Occupied and Vacant Units



Figure: 3.1.2 Occupied and Vacant Units

3.1.2 Public Housing

New York City Housing Authority (NYCHA) public housing is concentrated near the waterfront in the study area. There are around 6,350 public housing units in CD 3, which make up 8% of the total housing units in the district (75,975). These NYCHA properties are an asset to the community as they provide affordable housing for low and moderate-income residents. These units are part of NYCHA's preservation and maintenance plan⁴. The plan is also associated with an educational plan partnering with organizations from the area to educate tenants and owners to better understand rent regulation and rezoning plans.

Figure: 3.1.3 Public Housing

Public Housing



The NYCHA housing units near the waterfront are where the people with the lowest incomes in CD3 live, as shown in the map below. The lowest income population is located in census tracts 6, 20, 20.01, 24, and 26, all are located within close proximity to the waterfront.

Other important affordable housing programs for CD 3 are the Mitchell-Lama Section 8 programs. Mitchell-Lama was created in 1955 to provide affordable housing to the moderate and middle-income population. These units (colored purple in the above map) are located in

census tracts 22.01, 28, 30.2 and 32 where the moderate-income population is concentrated in CD3⁵. With the Section 8 program, residents benefit from government vouchers to ensure they pay no more than 30% of their income in rent. As seen in Figure 2, the Section 8 units (colored blue) are located in census tracts 6, 14.02, 22.01, 22.02, 28, 34, 38, and 40. In 2010, a total of 34.4% of housing units in CD3 were public or subsidized.

3.1.3 Age of Housing

The majority of buildings in the area were built in 1939 or earlier. Only 2,225 units have been built since 2005. This is a key factor for public services, environmental issues, and infrastructure in terms of natural disasters and accessibility.

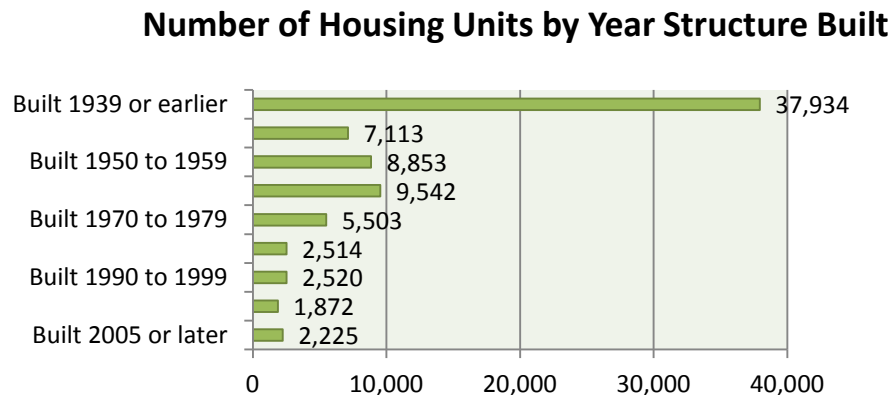


Figure: 3.1.4 Age Housing

3.1.4 Increase in Rent

The Furman Center's study reveals that renter households who have lived in their units for the last 4 years or less are paying more than the people who have lived in the area for a longer period of time.⁶ This could mean displacement in the near future for the low-income population in the study area, as their rents rise to keep up with the rents offered to new movers. In 2010, the median rent burden was 30% for new movers and 28% for long-term renters⁷.



Figure: 3.1.5 Median Monthly Rent Comparison

Median Contract Rent

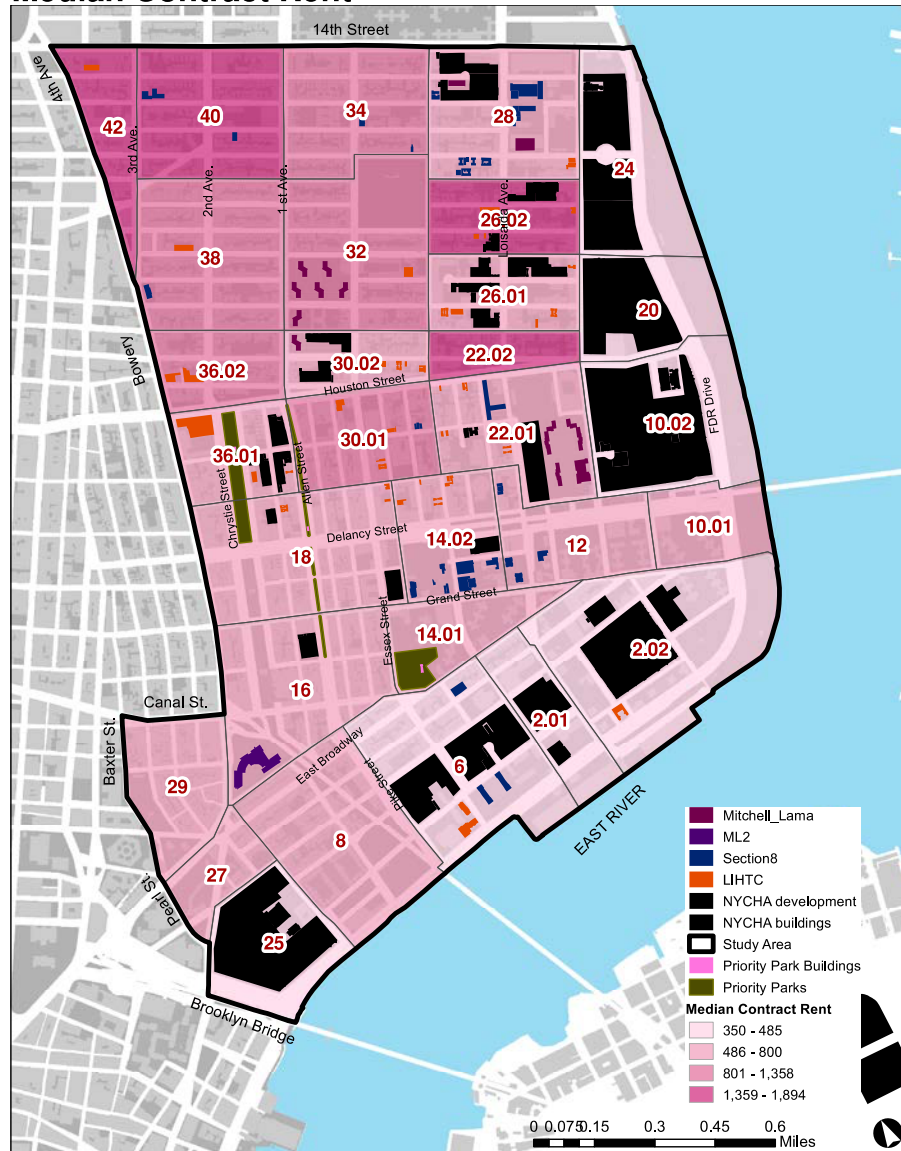


Figure: 3.1.6 Median Contract Rent

The concentration of highest rent rates is located in census tracts 40 and 42 near Union Square and census tracts 22.02 and 20.06 where people are paying between \$1,359 and \$1,894. On the other hand, as it is presented in the map on the left, the lowest rents rates are located near the waterfront.

According to the Furman Center, the people with the lowest incomes in the area may soon be displaced⁸. While rents increase rapidly, incomes are not growing proportionally.

3.1.5 Housing Units

According to the US Census Bureau 2009-2011, the average number of persons per family was 3.25 in 2000 and 3 in 2010.⁹ On the other hand, the number of persons per household in 2000 was 2.19 and for 2010 was 2.15. According to the Census Bureau, the change in the occupancy of each housing unit in this decade is not significant. However, it should be noted that many undocumented immigrants and residents living in an apartment who are not on the lease are likely not reported to the US Census Bureau. Therefore, the average number of persons per household is likely higher than documented in Figure 6.

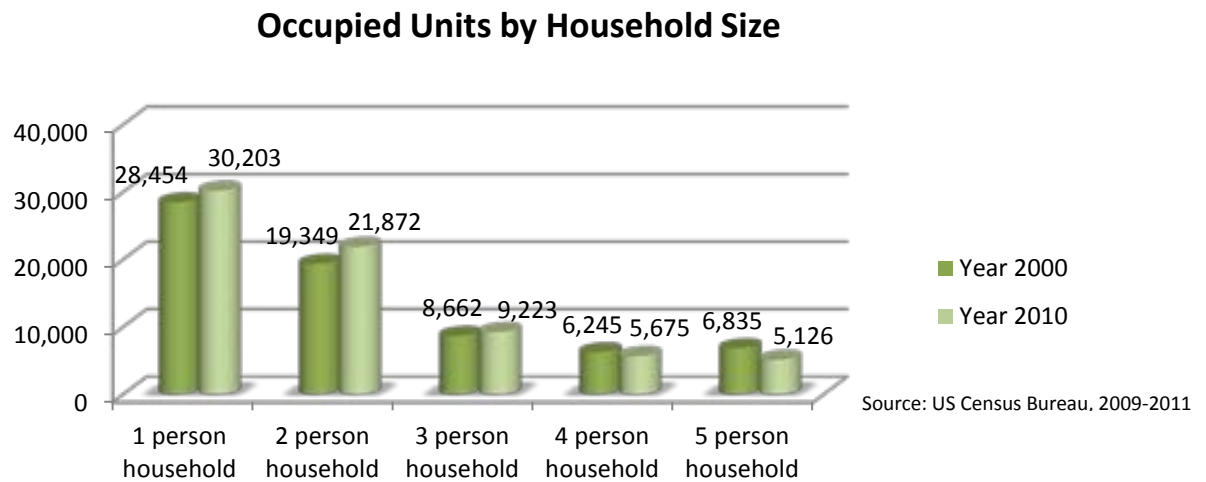


Figure: 3.1.7 Household Size

The number of family households decreased while the number of non-family household increased from 2000 to 2010. This is another gentrification effect in CD 3, in terms of affordable housing. This means that some families cannot afford the rent in CDs because it is increasing very fast and they have more responsibilities related to family expenses. The majority of new movers don't have a family so they are able to afford the rent.

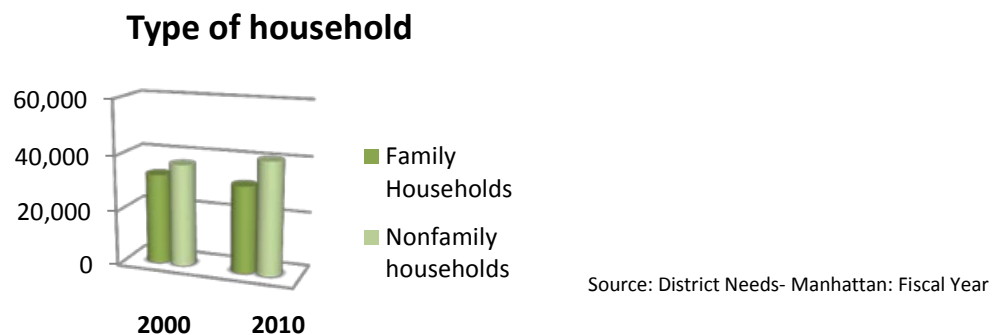


Figure: 3.1.8 Family and Nonfamily Households



ECONOMIC DEVELOPMENT Workforce in Community District(CD),
Industries in CD, Decline in MFG. Industry, Decline in Family Owned Retail Businesses

Housing is a key factor for community development in CD3, as stated in the demographics section, the population of families is growing and some of them cannot afford the increasing rent in CD3. NYCHA is working to retain affordable housing but the gentrification in CD3 could affect families with small businesses. Restaurants and bars have replaced their businesses and some families have suffered displacement. Finally providing affordable housing in CD3 with the increasing gentrification factor is one of the toughest challenges for developers.

3.2 Economic Development

This section provides an overview of the economy of Community District 3, including the composition of the workforce, major industries, and the geographic concentration of jobs. It then looks at changes facing the neighborhood in terms of the decline in family-owned retail businesses and an upsurge of restaurants, bars, and nightclub establishments on the Lower East Side as well as the decline of the manufacturing industry in Chinatown. It concludes with a survey of the economic development initiatives in the neighborhood and what they are doing to address the challenges presented.

3.2.1 Workforce in Community District 3

In CD 3, the vast majority of the residents do not work in the community. In fact, only 5,697 people both live and work in CD 3. This amounts to 11.7% of the workforce and 8.9% of the residents. In 2002, the earliest year on record for this data, slightly more people both lived and worked in the district, at a count of 6,113, though this still means that the wide majority of residents still worked outside the district over a decade ago.¹⁰

According to the U.S. Census Bureau, in 2010, there were 48,550 recorded jobs in CD 3, including full-time and part-time employment. The job count was up from 36,099 jobs in 2002. This is an increase of 34.5%, which is significant, as Manhattan's total job count actually declined 1.17% during the same time period.

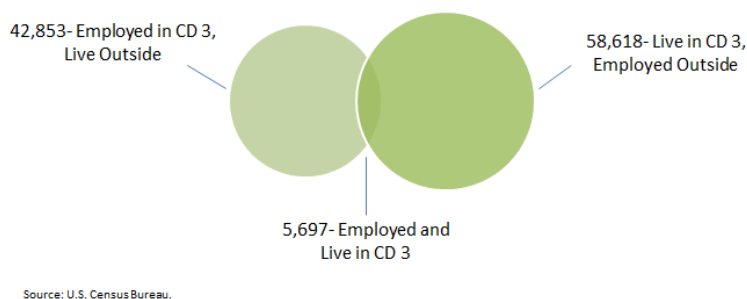
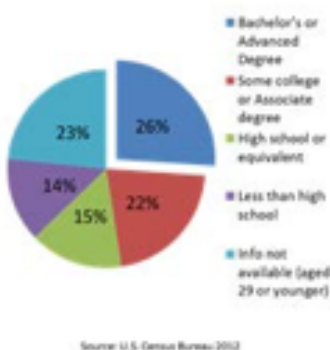


Figure: 3.2.1 CD3 Workforce inflow and Outflow

To provide an overview of the workforce as distinct from the residential population, whites composed the largest sector of worker race at 48.5%, with Asians at 30.3% and Blacks at 18.4%. American Indians/Alaska Natives and Pacific Islanders represent less than a percent and 1.9% identify as mixed race. In terms of ethnicity (viewed by the 2010 Census as separate from race), 19.7% of workers identify Hispanic or Latino. Therefore, Asians and Hispanics make up a slightly smaller proportion of the workforce than the residential population. On the other hand, blacks

make up significantly more of the workforce, at 18.4%, than the residential population, at just 7%.¹¹



U.S. Census Bureau findings show the workforce is fairly mixed in terms of educational attainment. Only 26.1% have a Bachelor's degree or an advanced degree. It is significant to note, however, that the information is not available for 23% of the population, who are aged 29 or younger, so a complete analysis cannot be performed. Like the residential population, the income of the CD 3 workforce is also mixed, with 30.8% earning less than \$1,250 per month, 32.1% earning \$1,251-\$3,333 per month, and 32.1% earning over \$3,333 per month.¹²

Figure: 3.2.2 CD3 Workforce Educational Attainment

Although most of the workforce does not live in CD 3, the majority of workers at 77.6% travel less than 10 miles to get from their home to their job. A small minority of 2.8% travel over 50 miles to get to their job. Similarly, most residents in CD 3 (86.4%) travel under 10 miles to get from their home in CD 3 to their place of employment, though 4.3% of the residents travel over 50 miles. Workers employed in CD 3 mainly travel to the south, southeast, east, northwest and north to get to their homes. Comparatively few people travel northwest, west, or southwest to get from their jobs to their homes, meaning few people work in New Jersey. Intriguingly, the vast majority of residents of CD 3 travel north less than 10 miles to get to their jobs. This means that most residents of CD 3 work north of Union Square in Manhattan and perhaps in the South Bronx.¹³

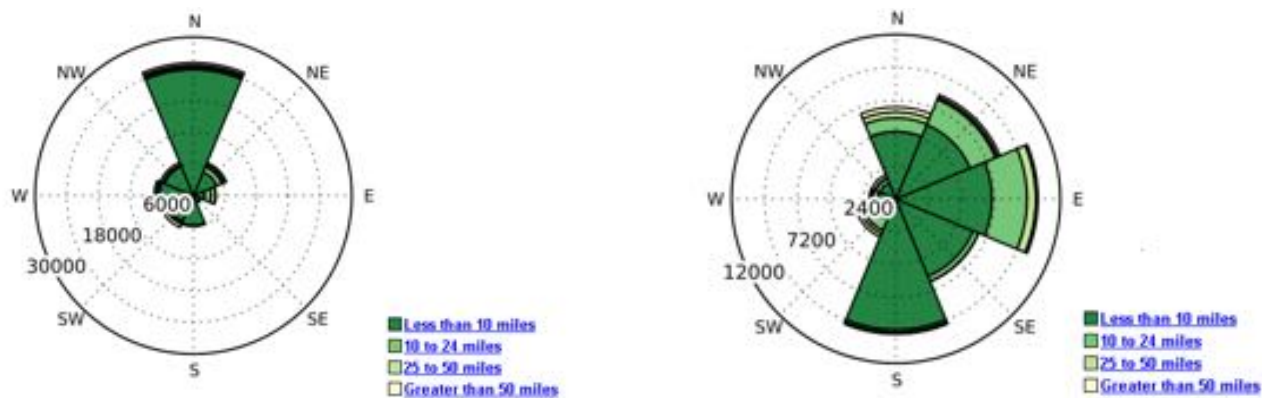


Figure: 3.2.3 CD3 Residents Travel to Jobs- Home Census Block to Work Census Block

Source: US Census Bureau

3.2.2 Major Industries

The CD 3 economy is mainly serviced-based. According to U.S. Census Bureau data from 2010, the largest industry by far is health care and social assistance at 37.3% of the jobs.¹⁴ According to the County Business Patterns Survey of the U.S. Census Bureau, New York County, the average annual payroll per employee in this sector is \$54,141.¹⁵

The second largest sector is accommodation and food services at 19.8% of the total jobs, followed by retail trade at 13.0%.¹⁶ The average annual payroll per employee in New York County was \$30,670 for accommodation and food services and \$36,840 for retail trade.¹⁷ The health care and social assistance industry in CD 3 has increased considerably in the last decade. The number of reported jobs in the industry has almost doubled, from 9,188 jobs in 2002 to 18,090 jobs in 2010.¹⁸

Table 3.2.1 Top Industries in CD3

Industry	Job Count	Percentage of Total Jobs	Annual Payroll per Employee in New York County
Health Care and Social Assistance	18,090	37.7%	\$54,140.98
Accommodation and Food Services	9,624	19.8%	\$30,670.26
Retail Trade	6,312	13.0%	\$36,840.34
Other Services (excluding Public Administration)	1,966	4.0%	\$47,628.64
Real Estate and Rental and Leasing	1,824	3.8%	\$67,928.07

Source: US Census Bureau

Unlike the health care and social assistance industry, which expanded significantly in the past decade, accommodation and food services industry and the retail trade industry grew just slightly from 2002-2010, gaining a cumulative 3,686 jobs and 1,146 jobs respectively.¹⁹ This finding is significant because in the last decade, many small family-owned stores, especially those that serve local retail needs have closed and have been replaced by an increasing number of bars and restaurants.²⁰

Figure: 3.2.4 CD3 Workers Travel to Jobs- Work Census Block to Home Census Block



3.2.3 Concentration of Jobs

The largest concentration of jobs in CD 3 is in the northwest corner of the district, near Union Square.²¹ This makes sense with the large concentration of health care and social assistance workers in CD 3, because the New York Ear and Eye Infirmary, one of the most prominent otolaryngology and ophthalmology hospitals in the world, and a major employer, is located at 14th Street and 2nd Avenue. Outside of the concentration of jobs near Union Square, the density of jobs per square mile consistently decreases closer to the waterfront, meaning the eastern and southern portions of the district have few jobs to offer.

3.2.4 Decline of Family-Owned Retail Businesses

In the Community District Three Fiscal Year 2013 Community Needs report, it is stated that, “as more and more nighttime businesses have entered the district...rents for commercial properties have exponentially increased, resulting in the demise of many retail businesses and leaving streets with little or no daytime foot traffic because storefronts are now shuttered during the day”.²² Several studies commissioned by Community Board 3 as well as several community organizations confirm the Community Board’s claim. Indeed, a commercial use survey of Avenue A between 1st Street and 14th Street, reveals that the largest category of commercial use is bars, restaurants and lounges at 35%.²³ Tellingly, the second largest category of commercial use is vacant storefronts at 13%. It seems that the changes in the neighborhood have left many businesses unable to contend with the increases in the costs of operation.

A study conducted by the community organization Two Bridges Neighborhood Council of 140 small businesses on Delancey Street, between Clinton Street and the Bowery and on Orchard Street between East Houston Street and Grand Street, produced complementary findings. Two Bridges (2009) summarizes that “some



Figure: 3.2.6 Broome St Nightlife

longtime businesses have closed their doors, due to exorbitant rent increases or increased competition from shiny new malls and mammoth discount shopping outlets in the suburbs”. Two Bridges found that almost all of the storeowners on Orchard St. who have been in the Lower East Side since before 2001 commented that business has “dramatically decreased” over the last few years. The owners of businesses opened in the neighborhood for five or less years generally said they came to the neighborhood because they wanted cheaper rent while staying in Manhattan. Numerous businesses, old and new, said they were disappointed by the lack of foot traffic in the neighborhood during the day. Two Bridges concludes that the divide of which businesses were succeeding was less between old and new retail businesses, but more between daytime retail and evening dining and entertainment locals. The organization reports “a shift had occurred, which now favors restaurants, nightclubs and bars”.²⁴

Delancey Street also now has a number of national chain stores, such as pharmacies, fast food establishments, gourmet coffee shops and shoe stores. The chain store owners who were interviewed said their stores were performing well, despite the changes in the neighborhood. Ironically, many of the chain stores serve local residents whereas the locally-owned small businesses cater to customers who come from outside the neighborhood.²⁵

A 2009 study, conducted by the not-for-profit organizations Good Old Lower East Side (GOLES) and the Urban Justice Center, of 59 vulnerable small businesses between 14th Street and Houston St and Avenues A and D, highlights some of the challenges small businesses are facing.



Almost half (46%) of the small-business owners surveyed reported that overhead costs such as rents, utilities, and insurance are rising. Seventy-six percent of survey respondents stated that as their business costs increase, their profits are not growing at a sustainable rate. GOLES and the Urban Justice Center concluded that “gentrification of the Lower East Side has been spurred by...a proliferation of upscale restaurants, bars, and boutiques.”²⁶

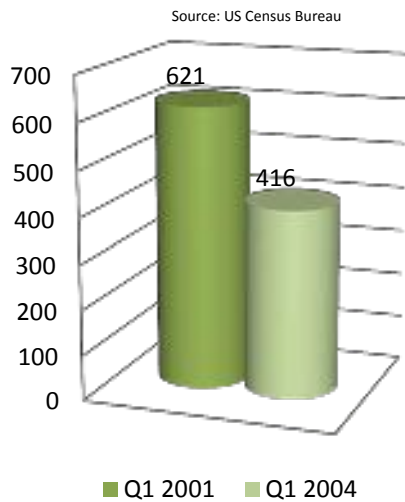
Figure: 3.2.7 Vacant Storefront on Avenue A

A survey performed by Community Board 3 Urban Fellow Paolo H. Lellis (2010) for Community Board 3 of 19 business owners and managers on 9th St between 1st and 2nd Avenues had similar findings. Business owners and managers were asked to rate a series of issues as “not a problem”, “a slight problem”, “a problem”, “a large problem”, or “a serious problem.” Of the 19 building owners and managers who answered all of Lellis’s questions, 91% consider taxes to be at least a “slight problem”.

Eighty-nine percent of the businesses surveyed considered utility costs to be at least a “slight problem”, and 82% considered difficulty receiving loans to be at least a “slight problem”. Finally, 54% of the businesses surveyed considered vacant storefronts to be at least a “slight problem”.²⁷

However, despite all the complaints about rising rents, Lellis (2010) finds the Lower East Side has a lower average annual rent of \$77 per square foot than nearby neighborhoods like the Meatpacking District at \$400-450 or the Financial District at \$100-400. Additionally, the rate of retail vacancies on the Lower East Side in 2009 was lower than that of the Meatpacking District or Financial District, at 6%, 9%, and 13% respectively.²⁸ This is not to say that increasing rents and vacancies are not problems, but rather that the issue is wider than just CD 3.

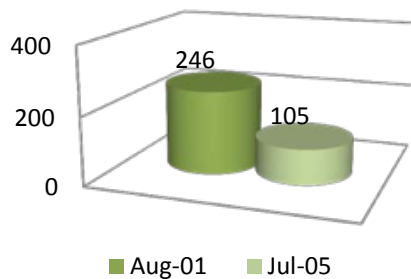
3.2.5 Decline in the Manufacturing Industry in Chinatown



A survey of recent economic changes in the neighborhood must also look at the decline in manufacturing, particularly in Chinatown. According to U.S. Census Bureau data from 2010, manufacturing is a very small sector in CD 3 at 1.5% of the total jobs. Though, even just a decade before, manufacturing had more of a meaningful role in the local economy at 6.0% of the total jobs in 2000.²⁹ However, particularly in Chinatown, September 11, 2001 dealt a devastating blow to the local economy. According to a report by the Asian American Federation in the second quarter of 2004, the manufacturing sector in Chinatown lost 33%, or 205, of its establishments, as well as 42%, or 4,965 of its jobs.³⁰ The number of garment factories

3.2.8 Decline in Chinatown Manufacturing Establishments

decreased 57%, from 246 before September 11, 2001 to 105 in June 2005, as reported by the Asian American Federation. Even outside the manufacturing industry, 43 percent of restaurants reported a revenue loss between 2001 and 2005. Even more recently, Chinatown has not returned to its pre-9/11 levels of economic activity.³¹



Source: US Census Bureau

3.2.9 Decline in Chinatown Garment Factories

3.2.11 Lower East Side Business Improvement District



3.2.10 Chinatown Partnership



3.2.6 Economic Development Initiatives

In response to the economic decline in Chinatown post-9/11, the Chinatown Partnership was established in 2006 with funds administered through the Lower Manhattan Development Corporation to bring together residents, business owners, and

community groups in order to rebuild the neighborhood. Today, the Chinatown Partnership leads efforts improving the neighborhood's physical environment to hopefully spur more economic activity. Their projects include a Clean Streets initiative, streetscape improvements, enhanced lighting, and wayfinding projects.³²

There are several other economic development initiatives in Chinatown and the Lower East Side. For instance, the Renaissance Economic Development Corporation offers small business courses and low-interest loans to Chinatown businesses, tours of Chinatown, and the Entrepreneurship Assistance Program- a 12 week course for first time business owners.³³ On the Lower East Side, a Business Improvement District focuses on directing business to the neighborhood through beautification efforts including street cleaning, graffiti removal, tree plantings, and holiday decorations and validated 2-hour free parking for shoppers, as well as discounted rates for merchants.³⁴ GOLES also provides workforce development support, including resume and cover letter writing, interview prep, job search assistance, specialized job sector training.³⁵ There are also a number of credit unions in CD 3, including Ukrainian National Federal Credit Union on 13th St and 2nd Ave, Self Reliance Federal Credit Union on 2nd Avenue and 7th St, the Lower East Side People's Federal Credit Union on Avenue B and 3rd St, and University Settlement Federal Credit Union on Eldridge St & Rivington St. Thus, with all of its economic development challenges, Community District 3 also has some strong assets working to create a vibrant local economy.

3.3 Housing and Economic Development SWOT Analysis

Strengths

- The area contains a relevant percentage of affordable housing units for low- and moderate-income residents: 8% of units are public housing and 48% are rent regulated.
- The average median rent burden is “affordable” at 30%.
- CD 3 has a lower vacancy rate than Manhattan or NYC.
- Several local organizations are working for the tenants and owners rights.
- Community District 3 has retail diversity that caters to its mixed-income residents.
- Jobs in the district have increase by 34.5% between 2002 to 2010.
- The majority of CD3 workers travel less than 10 miles to go to work.
- There are several local economic development initiatives, including the Chinatown Partnership, Renaissance Economic Development Corporation, the Lower East Side Business Improvement District and Good Old Lower East Side, and many credit unions.

Weaknesses

- Area income is not increasing as fast as rent.
- The majority of CD3 residents do not work in the district.
- Local residents are unable to frequent the small businesses during their open hours.
- There is low foot traffic for small businesses during the day
- Some small businesses are negatively impacted by the concentration of vacant properties
- CB 3 reports that they have not found the existing small business services and programs productive.
- There is low density of jobs in areas closer to the waterfront.
- Manufacturing has dramatically declined in Chinatown since September 11, 2001.

Opportunities

- Old housing can be renovated to address health and safety issues.
- Residents and businesses can save money by reducing their energy consumption in response to increasing utility prices.
- Co-ops are successfully renting storefronts to retail businesses.
- The Department of Small Business Services provides training and pro-bono legal services.
- Businesses can take advantage of the LES’s nightlife by opening their stores late at least once a week.
- Public housing residents may benefit from private commercial development on NYCHA-owned properties.

Threats

- Most buildings have old infrastructure that is ill equipped to face natural disasters
- The majority of the public housing buildings are located near the waterfront area in Evacuation Zone A.
- More low-income residents are at risk of being displaced due to increasing rents.
- Public housing residents may face gentrification that does not provide for their needs through the new private development on NYCHA properties.
- Most small businesses are and are struggling with increasing property taxes, utilities, and rents.
- Many small family-owned retail stores have closed and been replaced by bars and restaurants.

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- ¹ **Department of City Planning.** (2012). *Community District Needs- Manhattan: Fiscal Year 2013*. New York: Department of City Planning. Retrieved from http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf#mn03
- ² **Furman Report 2011.** "State of the City's Housing & Neighborhoods" Retrieved from: <http://furmancenter.org/research/sonychan/>
- ³ **Department of City Planning.** (2012). *Community District Needs- Manhattan: Fiscal Year 2013*. New York: Department of City Planning. Retrieved from http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf#mn03
- ⁴ **New York City Housing Authority (NYCHA)** 2012. NYCHA, Housing Development. Retrieved from: http://www.nyc.gov/html/nycha/html/developments/dev_guide.shtml
- ⁵ **U.S Census Bureau.** (2009-2011)
- ⁶ **Furman Report 2011.** "State of the City's Housing & Neighborhoods" Retrieved from: <http://furmancenter.org/research/sonychan/>
- ⁷ **Furman Report 2011.** "State of the City's Housing & Neighborhoods" Retrieved from: <http://furmancenter.org/research/sonychan/>
- ⁸ **Furman Report 2011.** "State of the City's Housing & Neighborhoods" Retrieved from: <http://furmancenter.org/research/sonychan/>
- ⁹ **U.S Census Bureau** (2009-2011)
- ¹⁰ **U.S. Census Bureau.** (2012). On the Map Application. Longitudinal-Employer Household Dynamics Program. Retrieved from <http://onthemap.ces.census.gov>.
- ¹¹ U.S. Census Bureau (2012)
- ¹² U.S. Census Bureau (2012)
- ¹³ U.S. Census Bureau (2012)
- ¹⁴ U.S. Census Bureau (2012)
- ¹⁵ US Census Bureau. (2010). County Business Patterns. Retrieved from <http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl>
- ¹⁶ U.S. Census Bureau (2012)
- ¹⁷ U.S. Census Bureau (2010)
- ¹⁸ U.S. Census Bureau (2012)
- ¹⁹ U.S. Census Bureau (2012)
- ²⁰ **Department of City Planning.** (2012). *Community District Needs- Manhattan: Fiscal Year 2013*. New York: Department of City Planning. Retrieved from http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf#mn03
- ²¹ **U.S.Census Bureau** (2012).
- ²² **Department of City Planning.** (2012). *Community District Needs- Manhattan: Fiscal Year 2013*. New York: Department of City Planning. Retrieved from http://www.nyc.gov/html/dcp/pdf/pub/mnneeds_2013.pdf#mn03
- ²³ **Lellis, P. H.** (2010). *Avenue A Retail Use Survey Results*. New York: Department of City Planning. Retrieved from <http://www.nyc.gov/html/mancb3/html/fellowship/ecodev.shtml>
- ²⁴ **Two Bridges.** (2009). *Lower East Side Merchants: Will They Survive the Malls, Martinis, and Media Hype?* New York: Two Bridges. Retrieved from http://www.twobridges.org/images/stories/PDFs/TB_Report.pdf
- ²⁵ **Two Bridges** (2009)
- ²⁶ **Good Old Lower East Side and the Urban Justice Center.** (2008). *NO GO for Local Businesses: The Decline of the Lower East Side's Small Business Identity*. New York: Urban Justice Center. Retrieved from http://www.urbanjustice.org/pdf/publications/Small_Business_report_FINAL.pdf
- ²⁷ **Lellis, P.** (2010). *9th St Business Owner/Manager Survey: A Survey of Businesses along 9th St between 1st and 2nd Avenues. I*. New York: Department of City Planning. Retrieved from <http://www.nyc.gov/html/mancb3/html/fellowship/ecodev.shtml>
- ²⁸ **Lellis, P.** (2010). *Retail Rents Overview*. New York: Department of City Planning. Retrieved from <http://www.nyc.gov/html/mancb3/html/fellowship/ecodev.shtml>
- ²⁹ **U.S. Census Bureau.** (2012). On the Map Application. Longitudinal-Employer Household Dynamics Program. Retrieved from <http://onthemap.ces.census.gov>

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- ³⁰ **Asian American Federation.** (2008). *Revitalizing Chinatown Businesses: Challenges and Opportunities*. New York: Asian American Federation. Retrieved from <http://www.aafederation.org/doc/RevitalizingChinatownBusinesses.pdf>
- ³¹ **Asian American Federation** (2008)
- ³² **Chinatown Partnership.** (2013, February 18). *About Us*. Retrieved from Chinatown Partnership: <http://www.chinatownpartnership.org/Gui/Content.aspx-Page=AboutUs.htm>
- ³³ **Renaissance Economic Development Corporation.** (2013, February 18). *Home Page*. Retrieved from Renaissance Economic Development Corporation: <http://renaissance-ny.org>
- ³⁴ **Lower East Side Business Improvement District.** (2013, February 18). *Who We Are*. Retrieved from Lower East Side Business Improvement District: <http://www.lowereastsideny.com/about/who-we-are/>
- ³⁵ **Good Old Lower East Side.** (2013, February 18). *Services*. Retrieved from GOLES: <http://www.goles.org/services.html>