

**Living in Isolation:
How language barriers shut immigrant New Yorkers out of
critical City housing service**

By the CUNY Center for Urban Research and Communities for Housing Equity:
Asian Americans for Equality, CAAAV: Organizing Asian Communities, El Centro de
Hospitalidad, Make the Road by Walking, Neighbors Helping Neighbors, The New York
Immigration Coalition, University Settlement Society, and the Urban Justice Center

March 5, 2007

Table of Contents

EXECUTIVE SUMMARY.....	4
<i>Key Findings:</i>	4
<i>Recommendations</i>	5
INTRODUCTION.....	6
FINDING #1: ACCESS TO CITY-WIDE HOUSING SERVICES INCREASED.....	8
FINDING #2: IMMIGRANT AND LIMITED ENGLISH PROFICIENT NEW YORKERS ARE PARTICULARLY VULNERABLE TO LIVING IN UNHEALTHY HOUSING SITUATIONS AND MOST IN NEED OF HPD SERVICES.....	9
FINDING #3: ALL NEW YORKERS DO NOT EQUALLY ENJOY INCREASED ACCESS TO CITY SERVICES THROUGH 311.....	12
CONCLUSIONS.....	17
RECOMMENDATIONS.....	17
APPENDIX.....	20
APPENDIX 1: NEIGHBORHOOD REFERENCE MAP.....	21
APPENDIX 2: COMPLAINT VOLUME AT HPD.....	22
APPENDIX 3: MULTIVARIABLE MODELS.....	23
APPENDIX 4: THE MULTILINGUAL CITY OF NEW OF NEW YORK.....	26
APPENDIX 5: HOUSING COMPLAINTS RECEIVED BY HPD.....	29
APPENDIX 6: CORRELATION TABLES.....	30

About the Authors

Communities for Housing Equity (CHE) is a coalition of affordable housing providers, community organizations and advocates who have come together to ensure that all New Yorkers have access to affordable and safe housing conditions. The coalition began to work together in early 2004, when community groups and advocates saw a rising complaints from community members due to the lack of city housing services for people with limited English proficiency. Since then, the coalition has created various forums and avenues through which immigrant tenants can directly share their experiences and discuss alternatives to improve city services. CHE also has an on-going working partnership with HPD to address these issues.

Communities for Housing Equity Members:

- Asian Americans for Equality
- CAAAV: Organizing Asian Communities
- Community Development Project, Urban Justice Center
- Make the Road by Walking
- Neighbors Helping Neighbors
- The New York Immigration Coalition
- University Settlement Society of New York

The Center for Urban Research draws on its professional staff as well as CUNY faculty and graduate students to undertake basic research on issues facing New York and other large cities and applied research for public agencies, nonprofit organizations, and other clients. It pursues these activities both to serve the public and to understand how global changes are influencing urban conditions. Two component organizations, the CUNY Data Service and the CUNY Mapping service, provide quantitative analysis of Census data and the spatial analysis and display of demographic and administrative data relevant to the many communities of New York City and its surrounding area. More information may be found at <http://www.urbanresearch.org>.

The Center is a unit of The Graduate Center of the City University of New York, located at 365 Fifth Avenue, New York, NY 10016. It is directed by Prof. John Mollenkopf.

Principal research and writing support was provided by Ana Champeny of the Center for Urban Research. Additional writing and editing support was Ericka Stallings and Javier H. Valdés of the New York Immigration Coalition, and Laine Romero-Alston of the Community Development Project of the Urban Justice Center. Analysis and opinions presented are those solely of the authors.

Communities for Housing Equity would like to thank the law firm of Morgan Lewis, LLP for the photocopying of this report and Christopher Caput for the design of the cover.

The New York Community Trust provided financial support for this report.

Executive Summary

In 2003, New York City Mayor Michael Bloomberg launched the much-anticipated 311 Call Center. “911 for emergencies, 311 for everything else,”ⁱ said the mayor. The new easy-to-remember number was intended to give New York City residents faster access to government services and make it easier to file complaints with the city. As expected, the number of complaints filed increased dramatically.

The authors of this report took a closer look at the number and sources of those complaints, particularly with regard to complaints filed about housing conditions. Such data support the findings from our first report, *Hear This! The Need for Multilingual Housing Services in New York City*: that immigrant tenants, particularly those who are linguistically isolated, are unaware of and/or unable to access city services.

This report confirms that linguistically isolated householdsⁱⁱ need greater access to housing services. Yet, these New Yorkers are limited in their ability to access city housing services because of language and cultural barriers. Our data also indicate that linguistically isolated New Yorkers have benefited far less from improved housing-complaint-collection processes than other New Yorkers.

The New York City Department of Housing Preservation and Development (HPD)—the city agency that works to ensure that tenants live in safe and healthy housing—has taken some steps to address these barriers. Our data suggest, however, that more needs to be done to improve access to housing services for linguistically isolated New Yorkers.

Key Findings:

1) Access to City housing services has increased two fold over the course of a four year period.

- Housing complaints to HPD increased by 60% from 2001 to 2005 from 300,000 to nearly 600,000.

2) Linguistically isolated New Yorkers are particularly vulnerable to living in unhealthy housing situations and most in need of HPD services.

According to Census data, linguistically isolated households:

- Have a median household income almost half that of non-linguistically isolated households
- Pay less in rent, on average, than non-linguistically isolated households, but they have a far higher average rent burden because their wages are less than non-linguistically isolated households.
- Moreover, neighborhoods with the most linguistic isolation have higher levels of housing deficiencies.

3) All New Yorkers do not equally enjoy increased access to City services through 311. Recent immigrant and limited English proficient New Yorkers are most isolated from critically needed housing services.

- Our research shows that as the level of household linguistic isolation increases the number of housing complaints dramatically decreases. As the share of households that speak English not well or not at all in a neighborhood increase by 1%, housing complaints decrease by 15 points, even when housing quality remains constant. Similarly, as the share of recent immigrant households increase by 1%, complaints fall by 15 points.

Recommendations

We continue to call on Mayor Bloomberg and HPD Commissioner Shaun Donovan to have HPD take the following steps to improve access to HPD services for linguistically isolated New Yorkers. In addition, We further call on the City Council Speaker and Council Members to pass the Equal Access to Housing Services Act that would require HPD to provide all oral and written communications be conducted in the top nine languages spoken by linguistically isolated New Yorkers in each borough in the City, including legislation that would require that HPD:

- Conduct targeted outreach to linguistically isolated communities, and diversify its media outreach;
- Implement effective tracking of language needs of tenants and maintain records on language services provided;
- Translate all written forms, correspondence, applications, informational materials and all other written communications
- Hire more qualified bilingual inspectors, examine the language ability of these inspectors, and ensure that appropriate bilingual inspectors are sent to linguistically isolated tenants;
- Improve and expand translation of published materials and the HPD website;
- Enforce usage of existing protocol to ensure that tenants can directly communicate with HPD personnel; and
- Increase funding for community groups to do outreach.

Introduction

New York City currently faces a severe affordable housing crisis. While the city has seen high levels of new construction for the past few years, the number of units that are safe and affordable for low- to mid-income families has decreased precipitously. From 2002 to 2005, the city lost more than 205,000 affordable units. The median monthly rent for unsubsidized apartments in the city increased by 8 percent, while the citywide median income fell by 6.3 percent.ⁱⁱⁱ Most disturbingly, the median rent burden for unsubsidized low-income renters rose from 43 percent of income to over 50 percent ... in just three years.

Immigrant communities are particularly hard hit by this housing crisis – even as they collectively help make the housing market strong. Without immigration, the City would face severe population decline and housing abandonment. Instead – as a result of population growth due almost entirely to immigration – housing demand exceeds supply and housing development and investment continue apace, helping keep the city prosperous.

Unfortunately, most immigrants enter the housing and labor markets at the low end and face severe challenges in finding decent, affordable housing. Immigrants make up two-thirds of the low-wage workers in New York City. Many do not speak English well or at all and/or are undocumented, putting them at the mercy of landlords. They are less likely than other New Yorkers to live in publicly-subsidized affordable housing, more likely to live in illegal and substandard housing, and pay a higher portion of their income for rent.^{iv} Additionally, landlords have been withholding basic services and repairs as a tactic to displace tenants in communities going through gentrification.

HPD's Mission Statement

Using a variety of preservation, development and enforcement strategies, HPD strives to improve the availability, affordability and quality of housing in New York City. As the nation's largest municipal housing agency, HPD works with private, public and community partners to strengthen neighborhoods and enable more New Yorkers to become homeowners or to rent well-maintained, affordable housing.

The New York City Department of Housing Preservation and Development (HPD) is the largest municipal developer of affordable housing in the nation. Since 1987, HPD has provided over \$6.3 billion to support the repair, rehabilitation and new construction of hundreds of thousands of units of housing. Over the next five years, HPD plans to spend \$3 billion in continued support of housing preservation and community development activities.^v In addition, HPD handles all complaints about housing quality of privately-owned rental units in the

City. Their code enforcement services represent one of the only mechanisms for low-income and Limited English Proficient (LEP) tenants to hold negligent landlords accountable and ensure healthy and safe living conditions for themselves and their families. However, vulnerable immigrant populations cannot use this vital service.

In May 2006, Communities for Housing Equity released the report titled *Hear This: The Need for Housing Multilingual Services in New York City*, which documented the poor housing conditions of a large percent of immigrant tenants living in New York City and barriers they face to accessing the critically needed housing services provided by HPD. The report showed an alarming lack of knowledge among LEP New Yorkers of city housing services, low rates of

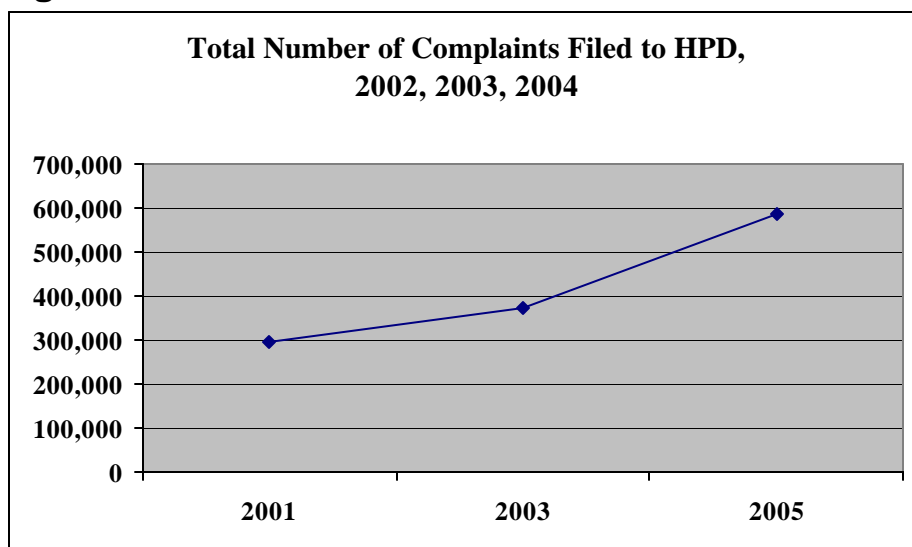
accessing services, and several levels of challenges present due to language barriers when they do file housing complaints to the City. HPD has made some strides in addressing the issues outlined in the report, and yet it is clear that it must continue to improve its performance in providing adequate, multi-lingual outreach and services for immigrant tenants and others with limited ability to speak English.

This report draws from official government data sources and builds upon the findings of *Hear This!*, particularly as related to issues of knowledge about and initial access to HPD services. (For more information on research methodology, see Appendix 3.) Based on our findings, we outline a set of recommendations that the city should follow to ensure that all New Yorkers live in safe and healthy homes.

Finding #1: Access to city-wide housing services increased.

Analysis of complaint counts to HPD clearly shows that housing complaints to the City have been on the rise since 2001. As shown in Figure 1, HPD received almost 300,000 complaints in 2001. In 2003, HPD received about 74,000 more complaints than in 2001. By 2005, a sharp increase in complaints occurred, receiving over 200,000 more complaints than the year before, a 60 percent increase from 2003. The complaint volume virtually doubled between 2001 and 2005.^{vi}

Figure 1



Source: Complaint Counts: CUR Calculations of Counts Released by the NYC Department of Housing Preservation and Development, 2006

The rise in access to the important housing services provided by HPD is largely due to the launch in March 2003 and the aggressive promotion carried out by the City through the 311 Call Center. The city created 311 to centralize and facilitate the process of accessing information about City services, including filing housing-related complaints. While this initiative has clearly played an important role in creating access to New Yorkers, our research shows that access is not shared evenly across all communities.

“For this reason, we’ve worked to tear down the barriers that too often separate immigrants from the services that can help them get good jobs, raise healthy families, and pursue the American Dream. First and foremost, we’ve been committed to improving access to local government. The greatest example of that is 311 - a single telephone number that New Yorkers can dial to get answers, register complaints, and access services - all completely anonymously. Interested in learning English as a second language...? Call 311. Want to file a complaint about your landlord...? Call 311... Operators are standing by 24 hours a day and ready to receive calls in more than 170 languages.” – Mayor Michael Bloomberg, January 18, 2007 at Keynote Address at New York City Global Partners Summit.

Finding #2: Immigrant and limited English proficient New Yorkers are particularly vulnerable to living in unhealthy housing situations and most in need of HPD services

Indicators of linguistically isolated households as vulnerable to poor housing conditions

While official secondary data sources do not allow us to look at individual housing conditions or complaint rates, we can see that they are far more economically vulnerable than households that are not linguistically isolated. As shown in Table 1, linguistically isolated households have a median household income almost half that of non-linguistically isolated households (\$20,800 compared to \$41,500). Linguistically isolated households pay less in rent, on average, than non-linguistically isolated households (\$590 compared to \$650), but they have a far higher average rent burden. Moreover, linguistically isolated households have a mean rent to income ratio of .41 compared to .34 for not linguistically isolated households. (Rent burden is the extent to which gross rents, including utility costs, exceed 30 percent of gross income)

Table 1: Linguistically Isolated Households Tables

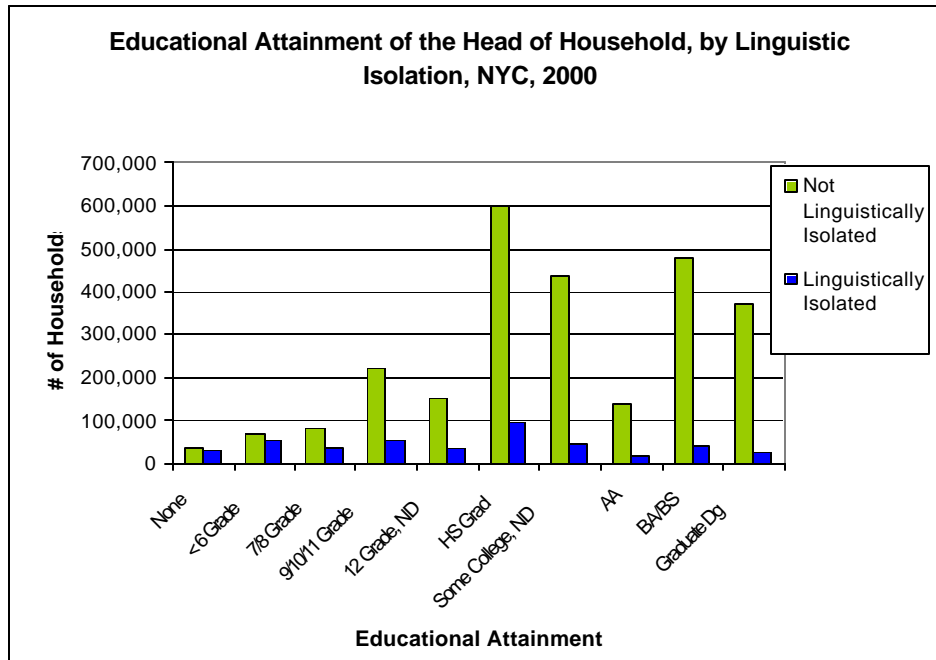
Rent	Total	Not Linguistically Isolated	Linguistically Isolated
Median	\$640	\$650	\$590
Mean	\$718	\$745	\$589
Standard Deviation	\$458	\$478	\$320

Rent burden: Gross Rent as Percent of Income	Total	Not Linguistically Isolated	Linguistically Isolated
Median	25	24	31
Mean	35	34	41
Standard Deviation	29	28	31

Household Income	Total	Not Linguistically Isolated	Linguistically Isolated
Median	\$38,000	\$41,500	\$20,800
Mean	\$57,590	\$62,109	\$31,130
Standard Deviation	\$73,886	\$77,447	\$38,520

Furthermore, representing an important indicator of vulnerability, on average heads of linguistically isolated households have less education than heads of non-linguistically isolated households.

Figure 2



Source: US Census Bureau, 2000

Linguistic Isolation and Housing Deficiencies

Neighborhood level data on maintenance problems and crowding from the New York City Housing and Vacancy Survey (HVS) can be compared to the neighborhood linguistic isolation rates drawn from the 2000 Census. Table 2 breaks out the share of households reporting either four or five of the seven maintenance problems (such as leaks, rodents, or cracks in the walls) to the HVS according to neighborhoods divided into thirds based on the share of linguistically isolated households. It shows that neighborhoods with the most linguistic isolation have somewhat higher levels of housing deficiencies.

Table 2

	Share of Linguistically Isolated Households		
	Lowest (Below 6.7%)	Middle (6.7% to 20.8%)	Highest (Over 20.8%)
Average Percent of Households with 4+ Maintenance Problems (Out of 7)	8.8	8.8	9.8
Average Percent of Households with 5+ Maintenance Problems (Out of 7)	4.3	4.3	5.3
Average Percent Crowded (Over 1.5 Persons Per Room)	1.9	2.1	4.3

The clear correlation between lower rents and lower housing quality suggests that linguistically isolated households are likely to have more housing related (or code enforcement) problems. High housing cost in New York City sharply limits the supply of housing available to low income households. As a result, linguistically isolated households, who on average have lower household incomes, have fewer housing options. The limited housing options of linguistically isolated households severely curtail their ability to negotiate for better housing conditions, making them a uniquely vulnerable population.

This makes the role of HPD in protecting the health and safety of the homes of LEP residents even more important, and the guarantee of language access critical.

Finding #3: All New Yorkers do not equally enjoy increased access to City services through 311.

Although immigrant and LEP New Yorkers are more vulnerable to living in poor housing conditions, our research found that they are not accessing City housing services as might be expected. Multivariate analysis of HPD complaint data combined with demographic data from the Census 2000 and New York City Housing and Vacancy Survey from 2005 show that, overall, immigrant New Yorkers, particularly recent immigrants, limited English proficient residents, and linguistically isolated households are much less likely than their counterparts to access City housing services. The lower the English ability of a household the less likely they are to access vital city housing services. Indeed, as the share of recent immigrants increase in a neighborhood by one percent, housing complaints decrease by 15 points, even when housing quality is held constant. The same holds for level of English proficiency. As the share of residents who speak little or no English increase by one percent, the numbers of housing complaints in that neighborhood also decrease by 15 points. In addition, as the share of linguistically isolated households increase by 1 percent in a neighborhood, complaint rates decrease 9 points. (See Appendix # for a detailed description of methodology and results of regression models.)

The Role of Demographics, Language and Access to City Services

Our analysis did find an interesting point of divergence within the data related to the different levels of access to HPD among different populations according to language. To get a better sense of the complaint volumes and the kinds of neighborhoods from which they come, the relationship between complaint volumes and trends and the demographic and housing characteristics of specific neighborhoods were analyzed.^{vii} Maps 2, 3, and 4 present the rate of total complaints for the 2001, 2003, and 2005. The map uses two colors to make it easier to distinguish change. The three lower rates (under 50, 50 to 100, and 100 to 200) are represented by beige, tan, and brown, respectively. Light blue and dark blue represent the two higher categories, 200 to 300 and over 300.^{viii}

Consistent with Finding #1, complaint rates increased overall in New York City from 2001 to 2005. And yet, neighborhoods can be grouped in three different levels in terms of change over these years in complaint rates.

The first group corresponds to those neighborhoods representing the highest complaint volume rate and change, as shown in the light or dark blue areas covering almost all of the Bronx, Northern Manhattan, and Central & Eastern Brooklyn.

The second group includes Central and Southern Manhattan and Queens, which are primarily brown (meaning lower rates of complaints), though they also increase, going from lighter to darker brown. Staten Island also has a slight increase over time; with the North Shore light blue and Mid-Island and South Shore remaining light brown in 2005. Only one neighborhood remains in the lowest category (beige) in 2005 (South Shore) and three remain light brown (Mid-Island, Throgs Neck/Coop City, and Bayside/Little Neck).

The third grouping includes six neighborhoods (not already dark blue in 2001) that do not change color: Chinatown/Lower East Side, Greenpoint/Williamsburg, Howard Beach/South Ozone Park, Bellerose/Rosedale, Hillcrest/Fresh Meadows, and South Shore of Staten Island. With the exception of South Shore, which has the lowest rate of complaints in the city in 2005, the remaining four neighborhoods remain at between 100 and 200 complaints per 1,000 units. Checking the actual complaint rates shows that complaints also increased in these neighborhoods, but not enough to shift categories. Their rates generally went from around 100 complaints per 1,000 units in 2001 to about 180 complaints per 1,000 units in 2005.

The uneven increase in some neighborhoods and lack of increase in group 3, warrant further inquiry as to which communities are more and which are less able to access the City's important housing services. While there are inevitably many factors that come into play, our analysis clearly shows that language and degree of isolation play a large role.

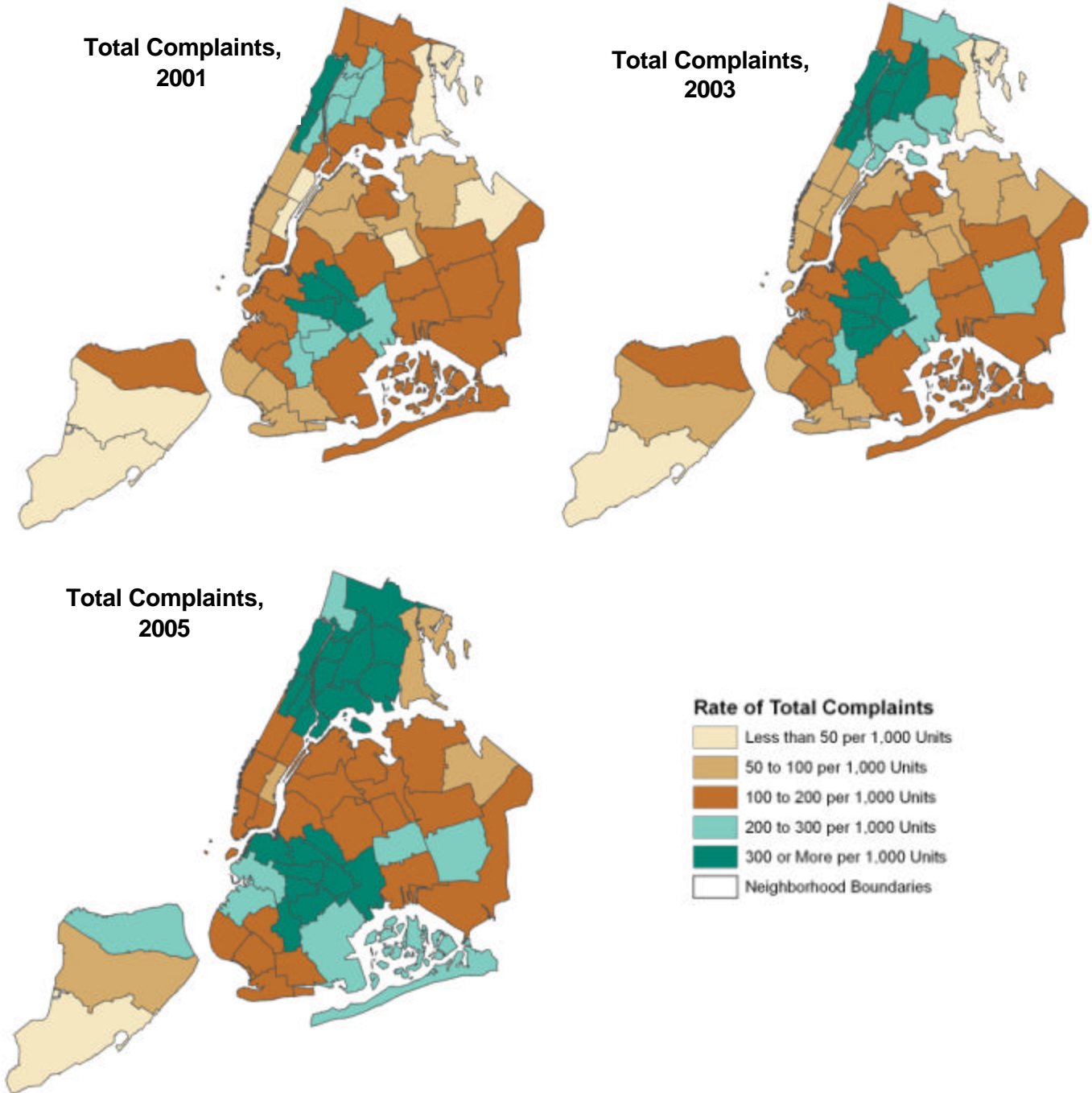
Lack of knowledge and language assistance as barriers to accessing critical housing services

Ms. Pierre* is a Haitian immigrant tenant living in the Bronx. Her primary language is French. Ms. Pierre has endured a number of housing violations in her apartment. She has water leaking into her bathroom from the apartment above. There is also water flowing through a ceiling light fixture and it appears that the fixture is about to fall. When she first moved into her unit the bathtub was in terrible condition, her landlord expressed no interest in either re-glazing or replacing the tub despite her complaints. As Ms. Pierre was in need of housing, she was forced to attempt to repair the tub to the best of her ability with cleaning supplies. Despite her best efforts the tub's condition remains poor. In addition, garbage is often strewn around the building and Ms. Pierre often feels compelled to clean it herself as the super often fails to do so. There have also been several times when the building's elevator did not work. At one point, a portion of the ceiling in her apartment collapsed and Ms. Pierre called African Services Committee (ASC). ASC staff called the appropriate people to have the ceiling fixed, but Ms. Pierre does not know whom they called. At no point did Ms. Pierre feel she could call HPD and no inspector has ever been to her home. When asked about this she explained that she would call a city agency like HPD or 311 if she knew the correct entity to contact and if she felt confident that someone would be able to speak to her in her own language. She said that it was the language barrier and the lack of information that prevented her from calling HPD herself.

** Name has been changed to protect the identity of the individual and her family.*

- from Hear This! Report, Communities for Housing Equity, March 2006

Maps 1, 2, and 3
Complaints about Housing Received by the
New York City Department of Housing Preservation and Development



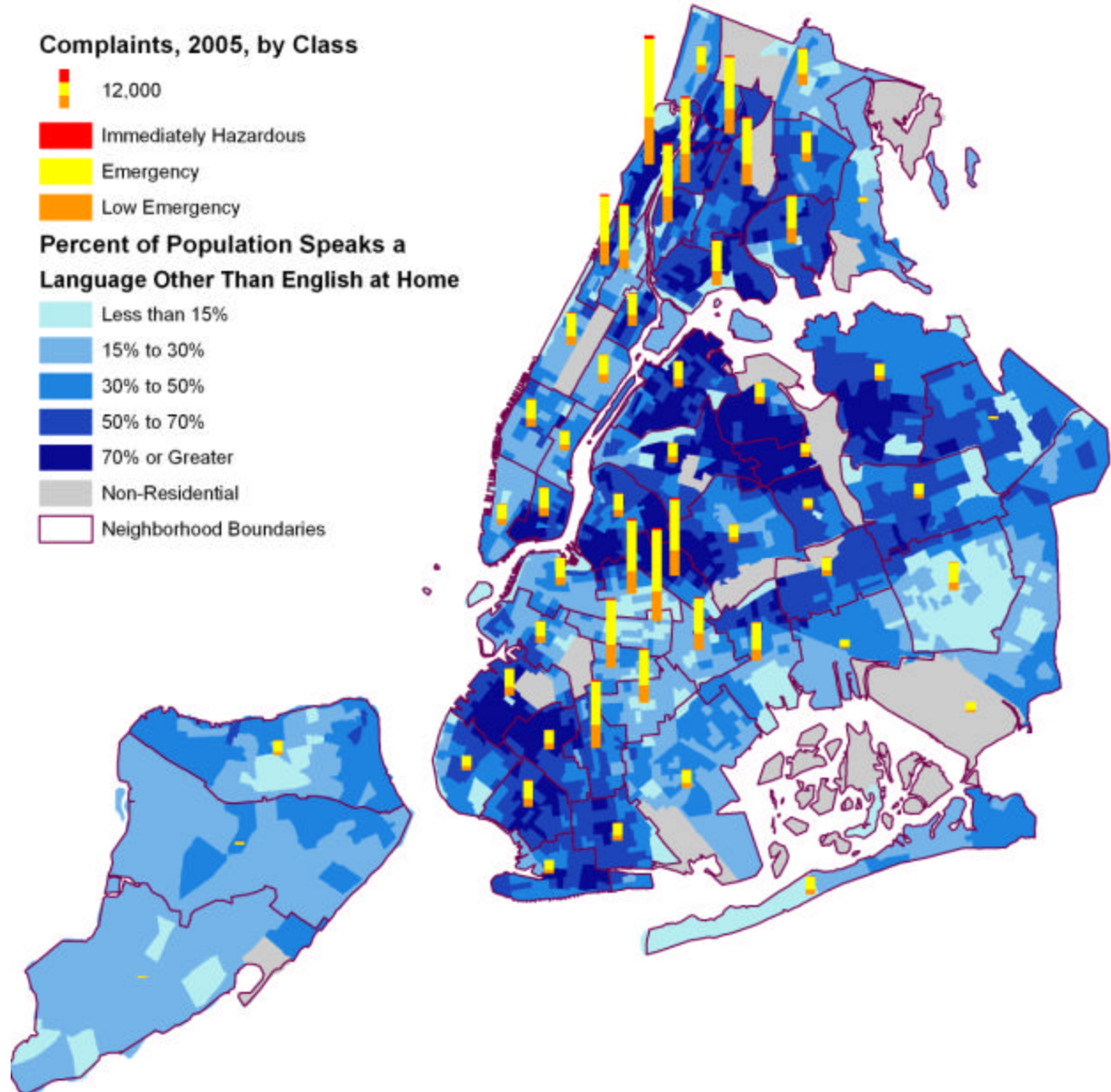
Complaint Rates: CUR Calculations of Counts Released by the NYC Department of Housing Preservation and Development, 2006 and Counts of Privately-Owned Rental Units from the New York City Housing and Vacancy Survey, 2005.

Map 4 displays complaint volume as a bar chart on top of colors showing the percent of the population that speaks a language other than English at home. It shows a striking divergence between language and complaint volume. Some neighborhoods with high volumes of complaints have few foreign-language speakers (see central Brooklyn), while others have many non-English speakers (the South Bronx and Central and East Harlem). Conversely, some neighborhoods with many foreign-language speakers, like Northern Queens and Southern Brooklyn, have low complaint volumes. While there is no clear overall relationship between complaint volume and the prevalence of speaking a foreign language, we do know that many of the neighborhoods that are enjoying increased access to HPD, such as Northern Manhattan and the Bronx, have large numbers of Spanish-speaking populations. Moreover, we see that several of the neighborhoods with low levels of complaints reported have high concentrations of residents who speak a language other than English or Spanish at home, such as in Chinatown, Queens and Southern Brooklyn. (See Maps 5 and 6 in Appendix #4 for distribution of foreign languages spoken at home. Map 7 in Appendix #5 shows similar patterns with complaint volume on top of linguistically isolated households.)

Given the context of New York City, where 23% of its residents are Spanish speakers and many of which have a long history residing in their communities, it is not a surprise that there are greater levels of access to City services. This is likely the case due both to systems that have been designed overtime to better meet the language needs of this community, and the degree to which Spanish-speaking communities understand and are able to maneuver these systems. At the same time, the experience of Spanish-speaking community members involved through CHE organizations and the results of the community survey as reported in the *Hear This!* report illustrate that barriers in the Spanish-speaking community also persist.

Map 4

Complaints about Housing Received by the New York City Department of Housing Preservation and Development



Sources:

Complaint Counts: Released by the NYC Department of Housing Preservation and Development, 2006
Speak Other Language: CUR calculations of Census Tract tables from *Census 2000 Summary File 3*.

Conclusions

Even though New York City has experienced record levels of residential construction since 2001, the number of housing complaints has doubled. In many neighborhoods with concentrations of linguistically isolated households – that are more vulnerable to bad housing conditions – complaints did not increase at the overall rate. At present, the evidence only allows us to infer that this may be due to the fact that many of these tenants do not know about HPD’s housing services or face language barriers in filing complaints. Considering the low income areas in which bad housing conditions are most likely to be present, those with large Spanish speaking populations generate higher complaint volumes comparable with those filed in low income areas with native English speakers. In low-income areas with many speakers of other languages, however, the level of complaints is unexpectedly low. This is troubling in light of the fact that we know that these non-English (and non-Spanish) speaking, linguistically isolated households have more housing maintenance problems and more prevalent overcrowding. Residents of these neighborhoods are also less able to advocate for better housing conditions because, on average, they have lower levels of educational attainment and lower household incomes, even though they have higher rent burdens and more housing quality concerns.

Recommendations

Mayor Bloomberg and his administration have been proud of “tearing down the barriers that often separate immigrants from the services that can help them get good jobs, raise healthy families, and pursue the American Dream.”^{xix} His main vehicle in doing so has been creating and implementing the 311 system. 311 has made significant strides to get the word about City services to its residents. The doubling of housing complaints since its inception shows that it has had a significant impact on New York City residents.

At the same time, the complaint filing patterns outlined in this report indicate that some communities whom the City is trying to reach are not participating fully in this new way of communicating with the City government. They are not accessing the vital City services, particularly those offered by HPD, at the level we might expect.

We believe our analysis of the relationship between complaint levels and types of non-English speaking communities suggests that HPD needs to build on its previous initiatives. Communities for Housing Equity seeks to work with Mayor and the City Council to increase HPD’s capacity to carry out effective multi lingual and culturally appropriate outreach to LEP communities. In addition, HPD must produce bilingual informational materials and correspondence and hire more bilingual inspectors qualified to meet the current high demand. To support the Mayor in his campaign to bring down barriers to City services, Communities for Housing Equity has created a multi-lingual poster for New York City tenants that will communicate to them the services that HPD provides.

As we have stated in our previous *Hear This!* Report, we call on Mayor Bloomberg and HPD Commissioner Shaun Donovan to ensure that HPD:

- **Conducts targeted outreach to immigrant communities:** It is imperative that HPD continues to improve its outreach to the immigrant community. This includes expanding outreach to new immigrant communities and creating comprehensive new procedures, such as increased capacity to field informational calls and complaints in multiple languages, improved capacity to send bilingual housing inspectors to buildings where tenants do not speak English, and improved capacity to provide a variety of informational materials in languages other than English. In addition, there should be a specific outreach campaign to targeted immigrant communities through an annual multi-lingual mailing before the heat season begins each year. This mailing should describe HPD services generally and code enforcement in particular, and provide information to tenants on how they can access the full range of HPD’s tenant services.
- **Diversifies media outreach:** In addition to mass mailings, HPD must make use of local and ethnic T.V., radio, and newspapers and magazines that reach non-English speakers in their primary languages.
- **Implements effective tracking of language needs of tenants, and maintains records on language services provided:** The primary language of the tenant filing the complaint should be identified and recorded at the time of the filing in order to trigger language needs for written communication, follow up and inspection. Moreover, inspectors should report language needs of tenants to facilitate further language-appropriate communication with that tenant in the future. This is especially important where multiple tenants who are not English proficient may make complaints in a single building, thereby identifying a potential “problem” building; aggressive outreach should be conducted in those buildings, in languages the tenants can understand, to ensure that all tenants are aware of the HPD resources at their disposal. In addition, HPD must implement record-keeping and monitoring practices to ensure that all new procedures are leading to improved services for LEP New Yorkers.
- **Hires more qualified bilingual inspectors and ensures that appropriate bilingual inspectors are sent to LEP tenants:** HPD must continue to improve the quality of communication between code inspectors and tenants. HPD must recruit and hire more bilingual inspectors to meet the needs of non-English speaking tenants. Moreover, HPD should prioritize matching the language skills of bilingual inspectors with the language needs of complaining residents.
- **Ensures communications about complaint and pending case are accessible:** HPD should ensure that follow up calls related to a filed complaint are made in the primary language of the tenant, or that appropriate translation is provided by the agency. Moreover, written communication about the case and/or inspection should be done in the primary language of the tenant.
- **Improves and expands translation of published materials and HPD website:** While HPD has made significant advances with respect to offering translated materials through its website, and we urge HPD to continue that effort, HPD must also make all written materials and publications available in multiple languages.
- **Targets code enforcement offices:** HPD should hire additional staff members who speak more languages, train staff members on how to handle non-English speaking

inquiries, and increase voice mailbox capacities so that no client is ignored based on the language he or she speaks.

- **Enforce usage of existing protocol to ensure that tenants can directly communicate with HPD personnel:** Usage of the language card by all inspectors must be enforced to ensure identification of language assistance services. Moreover, the language assistance line must be consistently used in all cases of verbal communication with LEP tenants, including during the filing of complaints, follow up calls, and during inspections when the inspector does not speak the primary language of the tenant.
- **Increase funding for community groups to do outreach:** With the financial support from City Council, HPD should grant an adequate amount to community groups for outreach purposes.

City Council Speaker and Council Members need to require that these recommendations carry the force of law by passing legislation requiring that all HPD communications, oral and written, must be conducted in the top nine languages spoken in New York City other than English, including legislation that would require that HPD:

- Must provide qualified translation services at meetings, training, or events at which HPD reasonably believes that one percent or more of the persons expected to attend speak any of the top nine languages spoken in New York City other than English.
- Must provide an adequate number of qualified bilingual housing inspectors in the top nine languages spoken by New York City residents to ensure that housing inspectors can communicate with limited English proficient individuals in their primary languages.
- Must translate all written forms, correspondence, applications, informational materials and all other written communications into the top nine languages spoken in New York City other than English.

Appendix

Appendix 2: Complaint Volume at HPD

Table 3

Complaint Volume at the New York City Department of Housing Preservation and Development, 2001, 2003, 2005						
	Year					
	2001		2003		2005	
Measure	N	%	N	%	N	%
Number of Non-Emergency Complaints	82,511	27.8	107,455	29.0	182,456	31.0
Number of Emergency Complaints	206,461	69.6	254,123	68.6	390,154	66.4
Number of Immediately Hazardous Complaints	7,795	2.6	9,058	2.4	15,294	2.6
Number of Total Complaints	296,767		370,636		587,904	
<u>Source:</u> Complaint Counts: CUR Calculations of Counts Released by the NYC Department of Housing Preservation and Development, 2006						

Appendix 3: Multivariable Models

A major challenge in conducting this research is the lack of direct evidence regarding how much immigrants know about HPD and how often they report complaints to HPD. Our research methodology has used multivariate analysis to look at report data from HPD combined with demographic data from the Census 2000 and New York City Housing and Vacancy Survey (HVS) from 2005 in an attempt to fill the gap in data. This is an attempt to “work around” the fact that we cannot analyze individual complaint-making behavior but instead must look at how these factors are associated across neighborhoods.

Multivariate models allow us to measure the relationship between linguistic isolation, the prevalence of the immigrant population, and reports to HPD after controlling for housing quality. We did not want control for housing quality by employing the share of units with five or more maintenance deficiencies reported on the HVS because this measure may suffer from underreporting behavior similar to that which may take place in the willingness to call 311 and to report rodents to a government interviewer. Essentially, we were concerned that the NYC Housing and Vacancy Survey may under record housing problems among certain populations who are reticent about complaining for fear of retribution. To address this potential problem, we employed a two-stage regression process.

In the first part, we modeled the likelihood of poor quality housing (the share of units with five or more maintenance deficiencies) as a function of housing and household characteristics. We considered rent, rent burdens, age of housing stock, size of buildings, and type of rental regulation as possible predictors of housing quality. Our final model utilized two independent variables – share of units that were rent controlled or stabilized and average contract rent in the neighborhood – to predict the distribution of poor housing.

Using this model, we calculated a predicted complaint rate per 1,000 private rental units in 2005, with results given in Model 1, Baseline (Table 4). The model is robust and the two independent variables explain almost half the variation in complaint rates. Models 2 and 3 add variables to test the impact of foreign language speaking and English ability, respectively, on complaint rates. The results are striking. The share of the population speaking a foreign language at home has a strong negative impact on reporting behavior. Our model suggests that for every one percent increase in foreign language speakers, the complaint rate decreases by 5 points. Model 3 shows an even stronger effect, with each one percent increase in the share of the population speaking English not well or not at all associated with a 15 point decrease in the complaint rate. Both Models 2 and 3 explain significantly more variance in the complaint rate than the baseline model of housing quality alone.

Table 4

Regression Models for Predicting Rate of Housing Complaints, 2005									
	Model 1 – Baseline			Model 2 - Foreign Language			Model 3 - English Ability		
Housing	B	SE	Sig	B	SE	Sig	B	SE	Sig
Average Contract Rent	-0.438	0.086	0.000	-0.4945	0.077	0.000	-0.501	0.08158	0.000
Share Rent Stabilized	4.781	1.087	0.000	6.3299	1.0345	0.000	6.03128	1.07648	0.000
Foreign Language									
Speak Other Language At Home				-4.9595	1.2458	0.000			
English Ability									
Speak English Not Well or Not At All							-15.242	4.7877	0.002
Constant	548.248	91.240	0.000	763.14	96.899	0.000	682.526	94.1258	0.000
R	0.690			0.775			0.750		
R ²	0.476			0.600			0.563		
R ² Change*				0.124			0.087		
Significance				0.000			0.002		
<i>Dependent Variable = Total Complaints Per 1,000 Private Rental Units, 2005</i>									
*R ² Change in relationship to Model 1-Base always; significance of R ² Change based on F-test									

Our next models (Table 5) built on the previous models by including the Census “linguistically isolated household” indicator (households in which no individual over 14 years of age speaks only English or another language and English very well). As with the preceding models, linguistic isolation is negatively associated with complaint rates, even after we control for predictors of housing quality. Each one percent increase in linguistically isolated households results in a 9 point decline in the complaint rate.

Our maps suggest that complaint volume is not lower in Spanish-speaking neighborhoods, as it is in other linguistically isolated populations. Model 5 includes both the overall share that are linguistically isolated and the share that is linguistically isolated and speaks Spanish. The divergence is clear. While overall linguistic isolation continues to exert a negative influence on the complaint rate that is counterbalanced by the positive reporting behavior of linguistically isolated Spanish speakers. Neighborhoods with linguistically isolated Spanish speakers would have complaint rates similar to neighborhoods without linguistically isolated households.

The last model considers whether recently arrived immigrants are part of the picture by looking at how much of the neighborhood population were pre-1965 immigrants, 1965 to 1990 immigrants, and 1990 to 2000 immigrants. We find that the share of pre-1965 immigrants has a very large, negative relationship with reporting of housing violations, probably because these groups are more established and financially secure. The coefficient for middle group, those who arrived between 1965 to 1990, is positive, but not statistically significant. The percent of the

population who are recently arrived immigrants, however, has a clear negative influence on complaint rates. Unlike the pre-1965 immigrants who may be filing fewer complaints because they are in better housing, we interpret this coefficient as showing that these neighborhoods have lower complaint volumes because recent immigrants lack knowledge of HPD or are unwilling to file a complaint. The variance in the complaint rate explained by these three models ranges from 58 to 65 percent and all are much better at predicting overall complaint rates than the predictors of housing quality alone.

While it would be better to have individual level data, we believe these neighborhood level models provide clear, consistent evidence that use of 311 to register complaints about housing code violations is lower among non-Spanish speaking immigrant groups, especially linguistically isolated households.

Table 5

Regression Models for Predicting Rate of Housing Complaints, 2005									
	Model 4 - Linguistic Isolation			Model 5 - Linguistic Isolation and Spanish			Model 6 - Year of Entry to US		
Housing	B	SE	Sig	B	SE	Sig	B	SE	Sig
Average Contract Rent	-0.5175	0.0813	0.000	-0.4364	0.0779	0.000	-0.4327	0.076	0.000
Share Rent Stabilized	6.16174	1.0653	0.000	4.9268	1.0381	0.000	6.21448	1.01025	0.000
Linguistic Isolation									
Linguistic Isolation	-8.5736	2.4794	0.001	-13.586	2.7057	0.000			
Linguistic Isolation Among Spanish Speakers				12.434	3.6892	0.001			
Year of Entry To US									
Before 1965							-32.151	11.0648	0.005
Between 1965 and 1990							5.53716	3.97294	0.170
Between 1990 and 2000							-14.81	4.56732	0.002
Constant	701.962	94.084	0.000	650.98	87.098	0.000	743.729	118.882	0.000
R	0.759			0.809			0.799		
R ²	0.575			0.654			0.639		
R ² Change*	0.100			0.178			0.163		
Significance	0.001			0.000			0.000		
<i>Dependent Variable = Total Complaints Per 1,000 Private Rental Units, 2005</i>									
*R ² Change in relationship to Model 1-Base always; significance of R ² Change based on F-test									

Appendix 4: The Multilingual City of New of New York

New York City is a city of immigrants. About 37 percent of New York City residents were born outside of the U.S. in 2000 and over 47 percent of New Yorkers spoke a language other than English in the home. Twenty five percent of New Yorkers spoke little or no English.^x The distribution of populations speaking languages other than English in New York City is thus an important factor to consider in relation to the number of housing complaints.

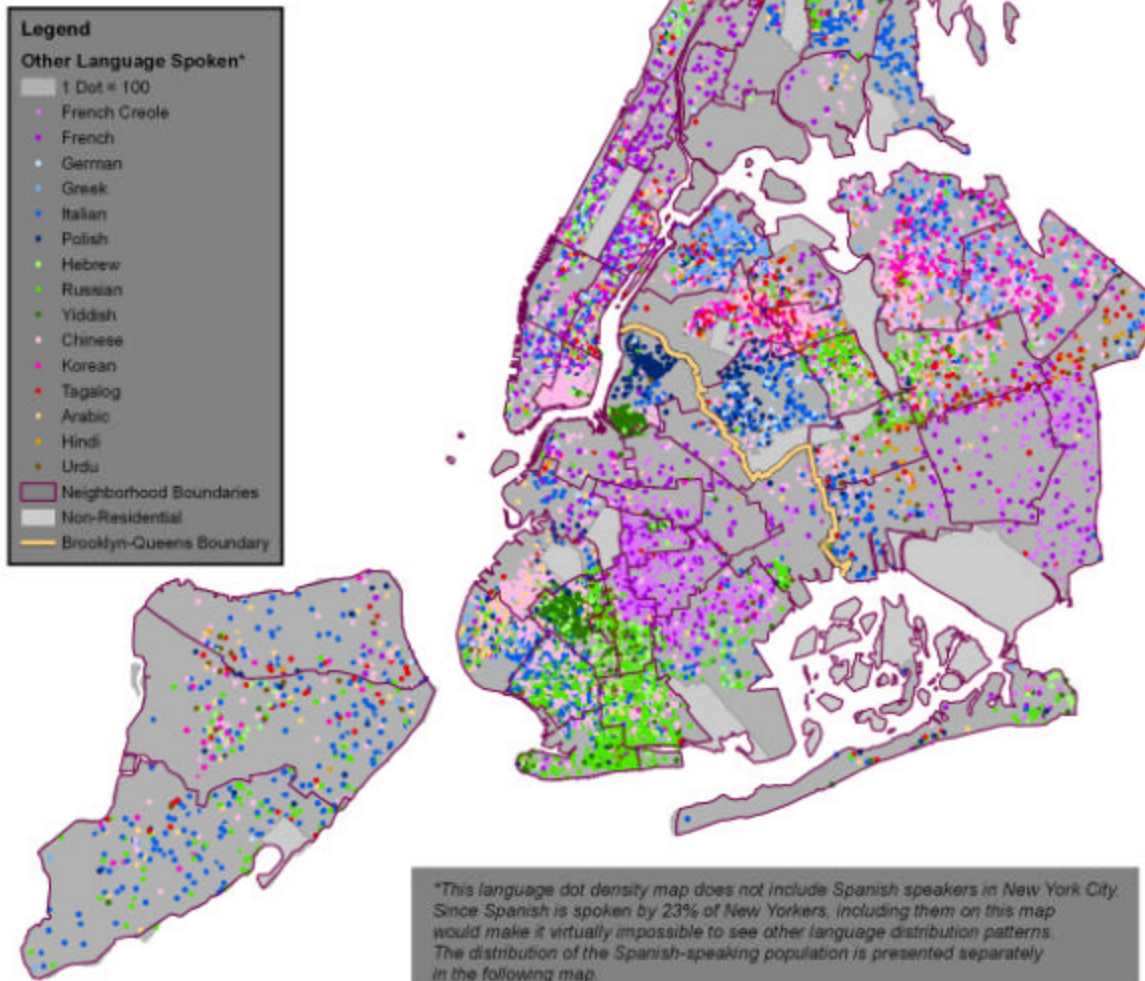
The following maps show the distribution of people speaking foreign languages (since one-quarter of New Yorkers speak Spanish, their distribution is shown on a separate map). In Map 5, each dot represents 100 individuals speaking a given language by census tract. Table 2 shows the different languages and their respective geographic concentration.

Table 6

Dot Color	Languages	Geographic Concentration
Pink & Purple	French, French Creole	South Bronx, Northern Manhattan, Central Brooklyn, and Southeast Queens
Blue	European languages (German, Greek, Italian, and Polish)	Northeast Bronx, Astoria, Middle Village/Ridgewood, Flushing/Whitestone, Bayside/Littleneck, and Staten Island
Green	Hebrew, Russian, and Yiddish	South Brooklyn, Williamsburg, Forest Hills/Rego Park, and Kew Gardens/Woodhaven
Pink	Asian and Pacific Islander languages—Chinese, Korean, and Tagalog (Filipino)	Chinese (light pink) in Chinatown/Lower East Side and all in Sunset Park, Sunnyside/Woodside, Elmhurst/Corona, Flushing/Whitestone, and Bayside/Littleneck
Brown	Arabic, Hindi, and Urdu	Jackson Heights, Southern Brooklyn

Map 5

Foreign Languages Spoken In New York City, by Residents Speaking Language Other than English or Spanish, 2000

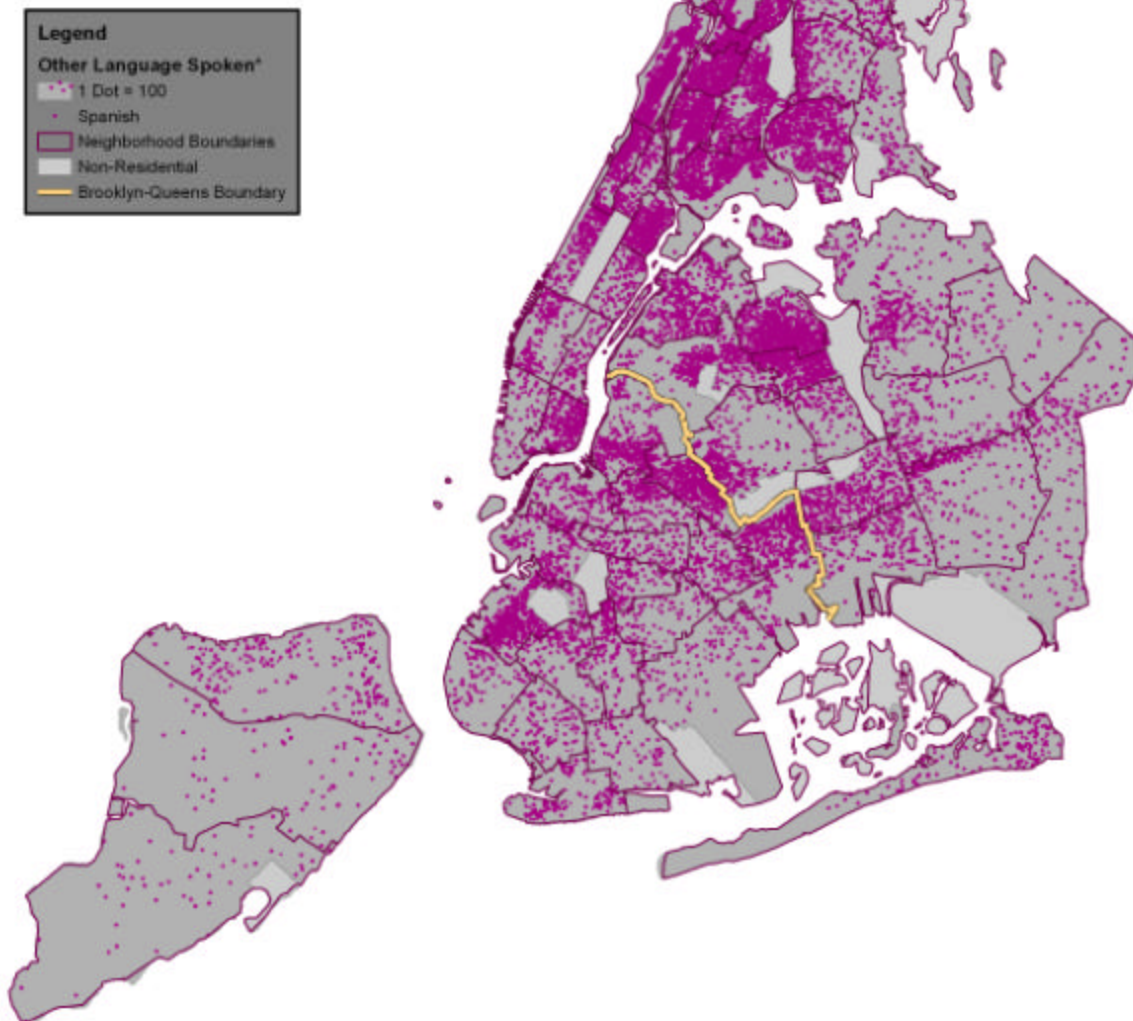


Source:

Language Spoken: CUR calculations of the *Census 2000 Summary File 3* by Census Tracts

Map 6

Residents Speaking Spanish At Home In New York City, 2000



Source:

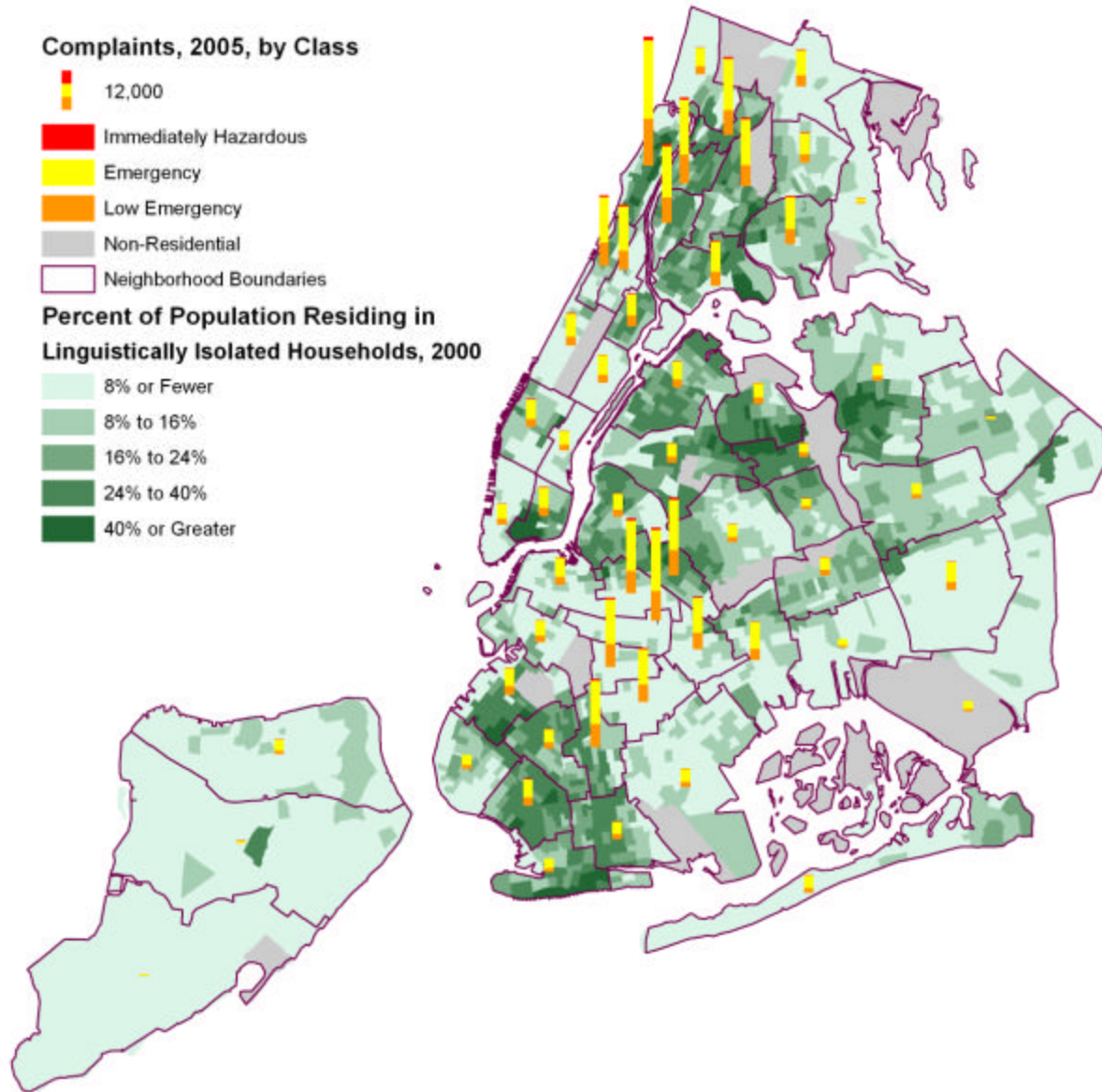
Language Spoken: CUR calculations of the *Census 2000 Summary File 3* by Census Tracts

Spanish speakers^{xi} are concentrated in Northern Manhattan, the South Bronx, Jackson Heights and Elmhurst/Corona in Queens, Bushwick and Sunset Park in Brooklyn, as well as Lower East Side/Chinatown.

Appendix 5: Housing Complaints Received by HPD

Map 7

Complaints about Housing Received by the New York City Department of Housing Preservation and Development



Definition:

Linguistically Isolated Household is a household where no individual over the age of 14 reports either speaking only English or speaking another language and speaking English “very well”.

Sources:

Complaint Counts: Released by the NYC Department of Housing Preservation and Development, 2006
Population in Linguistically Isolated Households: CUR calculations of the *Census 2000 Summary File 3* by Census Tracts

Appendix 6: Correlation Tables

Correlations between Neighborhood Rates of Housing Complaints Per 1,000 Units, by Class, 2005 and Demographic and Housing Stock Characteristics of All Households and Renter Households, 2005

	All Households, 2005 ¹				Renter Household, 2005 ¹			
	Total Rate	Rate, by Class, 2005 ²			Total Rate	Rate, by Class, 2005 ²		
Immediately Hazardous Rate		Emergency Rate	Low Emergency Rate	Immediately Hazardous Rate		Emergency Rate	Low Emergency Rate	
Percent of Households, By Head of Household Place of Birth								
Native Born	-0.178	-0.150	-0.158	-0.218	-0.097	-0.166	-0.050	-0.204
Puerto Rico	0.436***	0.471***	0.432***	0.435***	0.442***	0.454***	0.433***	0.289*
Dominican Republic	0.516***	0.539***	0.488***	0.565***	0.478***	0.551***	0.427***	0.436***
Other Caribbean	0.395**	0.331*	0.406**	0.376**	0.321*	0.337*	0.301*	0.398**
Mexico	0.002	0.001	-0.014	0.033	-0.163	-0.139	-0.175	-0.141
Other South and Central American	-0.026	-0.031	-0.028	-0.022	-0.172	-0.147	-0.184	-0.145
Canada or Europe	-0.610***	-0.610***	-0.617***	-0.590***	-0.498***	-0.518***	-0.478***	-0.462***
Russia	-0.273*	-0.268*	-0.279*	-0.259	-0.224	-0.220	-0.224	-0.172
China	-0.376**	-0.360**	-0.385**	-0.358**	-0.290*	-0.290*	-0.289*	-0.187
Korea	-0.286*	-0.282*	-0.287*	-0.282*	-0.254	-0.261	-0.248	-0.201
India	-0.295*	-0.294*	-0.292*	-0.299*	-0.288*	-0.288*	-0.286*	-0.204
Pakistan or Bangladesh	-0.173	-0.206	-0.180	-0.156	-0.191	-0.178	-0.198	-0.110
Philippines	-0.432***	-0.446***	-0.437***	-0.418***	-0.361**	-0.343**	-0.369**	-0.285*
South East Asia	-0.356**	-0.354**	-0.372**	-0.322*	-0.291*	-0.276*	-0.300*	-0.187
Other Asia	-0.287*	-0.325*	-0.293*	-0.272*	-0.267*	-0.284*	-0.251	-0.269*
First Generation Immigrant ³	0.178	0.150	0.158	0.218	0.097	0.166	0.050	0.204
First or Second Generation Foreign Born	-0.059	-0.075	-0.080	-0.017	-0.068	0.008	-0.120	0.091

¹ CUR calculations of the 2005 New York City Housing and Vacancy Survey Microdata

² CUR calculations of counts of housing quality complaints by tax block, 2005, released by the NYC Department of Housing Preservation and Development

³ In this case, even though technically not foreign born, Puerto Ricans are included with foreign born individuals because of similar migration patterns and Spanish-language speaking.

Correlations between Neighborhood Rates of Housing Complaints Per 1,000 Units, by Class, 2005 and Demographic and Housing Stock Characteristics of All Households and Renter Households, 2005 (continued)

	All Households, 2005 ¹				Renter Household, 2005 ¹			
	Rate, by Class, 2005 ²				Rate, by Class, 2005 ²			
	Total Rate, 2005	Immediately Hazardous Rate, 2005	Emergency Rate, 2005	Low Emergency Rate, 2005	Total Rate, 2005	Immediately Hazardous Rate, 2005	Emergency Rate, 2005	Low Emergency Rate, 2005
Percent of HH By Building Regulation								
Unregulated Rental	-0.191	-0.214	-0.180	-0.209	-0.542***	-0.564***	-0.523***	-0.445***
Rent-Stabilized or Rent-Controlled	0.462***	0.465***	0.434***	0.510***	0.359**	0.397**	0.327*	0.411
Public Housing	0.374**	0.388**	0.388**	0.342*	0.297*	0.261	0.325*	0.033
Average Rent and Average of Rent as Percent of Income								
Mean Contract Rent ⁴					-0.530***	-0.524***	-0.535***	-0.516***
Average of Gross Rent as a Percent of Income ⁴					0.321*	0.342*	0.307*	0.341*
Average of Contract Rent as a Percent of Income ⁴					0.285*	0.304*	0.273*	0.303*
Percent of HH By Lease Status and Section 8								
No Lease ⁴					-0.431***	-0.432***	-0.428***	-0.321*
On Section 8 ⁴					0.687***	0.691***	0.675***	0.603***
Percent of HH, By Building Size								
Single-Family	-0.423***	-0.419***	-0.406**	-0.452***	-0.358**	-0.360**	-0.352**	-0.302*
Two-Family	-0.289*	-0.307*	-0.273*	-0.315*	-0.437***	-0.435***	-0.436***	-0.325*
Three-Family	0.117	0.108	0.128	0.096	-0.213	-0.243	-0.191	-0.212
Four to Nine Units	0.266*	0.224	0.270*	0.260	0.019	-0.014	0.040	-0.021
Ten to Fifty Units	0.258	0.238	0.257	0.260	0.093	0.025	0.140	-0.085
Fifty to One Hundred Units	0.483***	0.497***	0.460***	0.523***	0.565***	0.612***	0.526***	0.564***
Over One Hundred Units	0.006	0.028	-0.007	0.028	0.120	0.146	0.101	0.119
Percent of HH, By Housing Quality Indicators								
Crowded (More than 1.5 Persons Per Room)	0.158	0.171	0.142	0.185	0.032	0.069	0.008	0.067
Five+ Maintenance Problems	0.790***	0.802a	0.776***	0.809***	0.812***	0.824***	0.788***	0.820***
Four+ Maintenance Problems	0.806***	0.809***	0.792***	0.825***	0.829***	0.835***	0.809***	0.828***
Need Additional Heat Source	0.729***	0.745***	0.731***	0.717***	0.654***	0.631***	0.658***	0.575***
Heat Broke (Over 6 Hours)	0.673***	0.675***	0.665***	0.681***	0.613***	0.619***	0.597***	0.623***
Have Phone	-0.369**	-0.398**	-0.363**	-0.374**	-0.118	-0.083	-0.140	-0.048

¹ CUR calculations of the 2005 New York City Housing and Vacancy Survey Microdata

² CUR calculations of counts of housing quality complaints by tax block, 2005, released by the NYC Department of Housing Preservation and Development

⁴ Only calculated for Renter Households

Correlations between Neighborhood Rates of Housing Complaints Per 1,000 Units, by Class, 2005 and Demographic and Housing Stock Characteristics of All Households and Residents of New York City, 2000

	All Households or All Residents, 2005³			
	Total Rate, 2005	Rate, by Class, 2005⁴		
		Immediately Hazardous Rate, 2005	Emergency Rate, 2005	Low Emergency Rate, 2005
Percent of HH, by Building Size				
Single-Family	-0.400**	-0.399**	-0.383**	-0.429***
Two-Family	-0.252	-0.280*	-0.237	-0.276*
Three or Four Family Home	0.101	0.078	0.109	0.086
Five to Nine Units	0.314*	0.313*	0.314*	0.313*
Ten to Fifty Units	0.500***	0.503***	0.483***	0.530***
Over Fifty Units	-0.008	0.015	-0.023	0.018
Percent of HH, by Year Building Was Built				
Built between 1980 and 2000	0.017	0.058	0.022	0.003
Built Before 1980	-0.017	-0.058	-0.022	-0.003
Percent of HH, by Phone Access				
No Phone	0.779***	0.796***	0.781***	0.767***
Percent of HH, by Tenure				
Renter (Census)	0.613***	0.616***	0.595***	0.641***
Percent of HH, by Rent and Income				
Median Rent (Census)	-0.583***	-0.581***	-0.586***	-0.571***
Mean Rent (Census)	-0.575***	-0.572***	-0.579***	-0.564***
Average of Gross Rent as a Percent of Income (Census)	0.710***	0.717***	0.693***	0.736***
Mean Household Income	-0.586***	-0.583***	-0.584***	-0.583***
Median Household Income	-0.586***	-0.583***	-0.584***	-0.583***
Percent of Population, by Hispanic Origin				
Non-Hispanic	-0.427***	-0.455***	-0.406**	-0.463***
Mexican	0.126	0.120	0.110	0.155
Puerto Rican	0.387**	0.424***	0.385**	0.384**
Dominican	0.484***	0.504***	0.454***	0.536***
Colombian, Ecuadorian, or Peruvian	-0.166	-0.169	-0.179	-0.140
Percent of Population, by Race				
Non-Hispanic White	-0.755***	-0.740***	-0.758***	-0.744***
Non-Hispanic Black	0.665***	0.626***	0.686***	0.623***
Non-Hispanic Asian	-0.530***	-0.515***	-0.536***	-0.514***
Percent of Population, by Place of Birth, Citizenship, and Year of Entry				
Foreign Born	-0.088	-0.120	-0.110	-0.041
Born in Puerto Rico	0.433***	0.470***	0.429***	0.435***
Foreign Born, Non-Citizen	0.031	0.016	0.004	0.084
Came to the US in the 1990s	-0.010	-0.018	-0.034	0.038
Between 1965 and 1990	0.165	0.125	0.146	0.204
Before 1965	-0.282*	-0.247	-0.295*	-0.257

² CUR calculations of counts of housing quality complaints by tax block, 2005, released by the NYC Department of Housing Preservation and Development

⁵ CUR calculations of the Census 2000 Five Percent Public Use Microdata Sample

Correlations between Neighborhood Rates of Housing Complaints Per 1,000 Units, by Class, 2005 and Foreign Language Spoken and English Ability of the Population of New York City, 2000

	All Households or All Residents, 2005¹			
	Total Rate, 2005	Rate, by Class, 2005²		
		Immediately Hazardous Rate, 2005	Emergency Rate, 2005	Low Emergency Rate, 2005
Percent of HH, by Household Language and Linguistic Isolation				
English	0.009	-0.010	0.036	-0.043
Spanish	0.477***	0.503***	0.457***	0.509***
Indo-European	-0.501***	-0.522***	-0.506***	-0.486***
Asian	-0.482***	-0.464***	-0.491***	-0.462***
Other Language	-0.089	-0.114	-0.092	-0.081
Linguistically Isolated	0.024	0.048	-0.004	0.075
Percent of Population, By How Well They Speak English				
Very Well or Well	-0.149	-0.139	-0.176	-0.098
Not Well	0.016	0.041	-0.012	0.068
Not at All	0.176	0.209	0.146	0.230
Percent of Population, by Foreign Language Spoken at Home				
Speak Any Foreign Language At Home	-0.060	-0.042	-0.089	-0.005
Spanish	0.437***	0.462***	0.414**	0.474***
French	0.139	0.088	0.146	0.127
French Creole	0.270*	0.209	0.272*	0.269*
German	-0.448***	-0.444***	-0.454***	-0.432***
Greek	-0.328*	-0.336*	-0.332*	-0.319*
Italian	-0.495***	-0.464***	-0.495***	-0.494***
Polish	-0.238	-0.242	-0.242	-0.228
Hebrew	-0.209	-0.231	-0.212	-0.199
Russian	-0.260	-0.256	-0.265	-0.248
Yiddish	-0.120	-0.135	-0.124	-0.110
Chinese	-0.396**	-0.368**	-0.405**	-0.377**
Korean	-0.326*	-0.319*	-0.329*	-0.318*
Tagalog	-0.398**	-0.399**	-0.397**	-0.396**
Arabic	-0.266*	-0.272*	-0.271*	-0.254
Bengali	-0.235	-0.251	-0.239	-0.222
Hindi	-0.397**	-0.415**	-0.398**	-0.389**
Kru, Ibo, Yoruba	0.449***	0.445***	0.456***	0.433***
Urdu	-0.297*	-0.324*	-0.302*	-0.284*

² CUR calculations of counts of housing quality complaints by tax block, 2005, released by the NYC Department of Housing Preservation and Development

⁵ CUR calculations of the Census 2000 Five Percent Public Use Microdata Sample

ⁱ <http://www.nyc.gov>

ⁱⁱ A *linguistically isolated* household is one in which no individual over the age of fourteen reports either speaking only English or speaking another language and speaking English “very well”.

ⁱⁱⁱ 2005 NYC Housing and Vacancy Survey.

^{iv} Schill, Michael et al (1998) “The Housing Conditions of Immigrants in New York City,” *Journal of Housing Research*, Vol. 9 No. 2, Fannie Mae Foundation.

^v <http://www.nyc.gov/hpd>.

^{vi} See Appendix, Table 1 for detailed complaint count data.

^{vii} Since many tax blocks have a low volume of complaints and there are a great many of them (over 20,000) it would be difficult to analyze change across all the blocks at once. We therefore aggregated tax blocks to 55 neighborhoods using the same neighborhood boundaries employed by the NYC Housing and Vacancy Survey and the 2000 Census 5 percent Public Use Microdata Sample. These boundaries allow us to compare information about housing complaints across a broad range of neighborhood characteristics. Of course, some neighborhoods have more privately-owned rental housing under HPD jurisdiction than others. To account for this, we used the 2005 New York City Housing and Vacancy Survey to estimate the number of privately-owned, occupied rental units in each neighborhood. We then calculated the number of complaints per 1,000 private rental units. We exclude public housing units from this count because their housing standards are the purview of the NYC Housing Authority, not HPD.

^{viii} When considering an increase in complaints, the base rate is important. For example, an increase of 10 complaints in a block that started with 10 complaints is very different than one that started with 100. Oftentimes, the percent change is used to account for that increase. But, the percent change itself can be misleading because a change from 10 to 20 is the same percent increase as a change from 250 to 500. The maps below show both sides of the coin—the relative level in 2001 and the increase to 2005. The base color gives us the number of complaints in 2001; so darker colors had higher complaint volume. The bars represent the increase in complaints from 2001 to 2003 and from 2003 to 2005. So, a light area with tall bars had low call volume that increased a lot. A dark area with short bars had high complaint volume and did not increase a lot.

^{ix} Mayor Michael Bloomberg, January 18, 2007 at Keynote Address at New York City Global Partners Summit.

^x US Census 2000

^{xi} Even though they are not immigrants, Puerto Ricans are part of the Spanish Speaking population in our study.