Revising the Size and Characteristics of New York's Hispanic Subgroups Reported in the 2000 Census

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Introduction

Between 1970 and 2000, New York City's Hispanic population increased by 870,000 persons, from 1.28 to 2.15 million. Most of this growth was related to the passage of the 1965 Immigration and Nationality Act and subsequent amendments, which made it much easier for persons from the Caribbean and South America to enter the United States. Prior to this, New York City's Hispanic population was dominated by Puerto Ricans, who first arrived in large numbers in the 1940s. Migration from Puerto Rico began to wane after 1970, and there was a net outflow of Puerto Ricans from New York City to other parts of the northeast and to other regions. In their place came new immigrants from the Dominican Republic, Ecuador, Colombia, and other Latin American countries. In the last decade, this mix of immigrants has been further augmented by inflows – both domestic and international – of Mexicans, who are now leaving their imprint on the city's neighborhoods, just as Puerto Ricans did half a century earlier.

Although the 2000 census provided a good count of the nation's Hispanics, it did not provide accurate counts of Hispanic subgroups, especially smaller groups that had to "write-in" their responses on the Hispanic question (Cresce and Ramirez, 2003; U.S. General Accounting Office, 2003; Logan, 2002). Few places were as adversely affected as New York City, where new immigrants from Latin America have dramatically altered the ethnic mix of Hispanics over the last 30 years. Accurate information on the composition and characteristics of specific Hispanic subgroups is important for local government efforts to design meaningful, cost-effective ways of meeting the needs of these subgroups. Programs aimed at improving English language proficiency, providing assistance to the disabled, and making child care available to working mothers, for example, all use estimates of populations in need. Shortfalls in estimates can create serious problems in preparing budgets and planning the scope of services. To date, program planners and service delivery specialists have had no choice but to use data for Hispanic subgroups that were directly identified in tallies from write-in responses. It has become clear, however, that these tallies represent only a subset of each Hispanic subgroup.

The Census Bureau has acknowledged that the counts of persons in specific Hispanic subgroups for the nation are low, but no research has been conducted on the effect these shortfalls may have on local area applications of the subgroup data. Common language aside, there is little doubt that major demographic and socioeconomic differences exist between Hispanic subgroups in New York City; each subgroup also has distinct patterns of residential settlement (Lobo et. al, 2002). Yet, variables such as household and family composition, work-force participation, English language proficiency, housing type, and neighborhood of settlement are all analyzed based on data for the subset of Hispanic subgroup members who were directly identified in the question

on Hispanic origin. Almost no information exists about the biases this subset may introduce as users employ these data to describe the characteristics of local populations. This research helps fill this void by revising the counts for specific Hispanic subgroups and comparing their characteristics to those of the originally reported subgroups.

Background

In both 1990 and 2000, the Hispanic origin question contained separate boxes for Mexicans, Puerto Ricans, and Cubans, and these subgroups were able to "check-off" their subgroup affiliation on the questionnaire (Figure 1). However, the Hispanic origin question on the two censuses differed in their instructions for the other Hispanic subgroups. In 1990, the other subgroups were required to check-off the category *other Spanish/Hispanic* and "write-in" their subgroup; specific examples, like Dominican and Colombian, were provided after the instructions to print the name of the subgroup in the available box. In 2000, the other subgroups were required to check-off the category labeled *other Spanish/Hispanic/Latino* and write-in their subgroup, but no examples of subgroups were provided.

Some write-in responses were not indicative of specific Hispanic subgroups, but instead were more general in nature (for example, in some cases the check-off for *other Spanish/Hispanic/Latino* was marked, but the box was left blank or the word Hispanic was written in). In this paper, these responses are referred to as *unspecified Hispanics;* those that entered a specific subgroup are referred to as *write-in Hispanics,* while Mexicans, Puerto Ricans, and Cubans are referred to *check-off Hispanics*. Between 1990 and 2000, the number of unspecified Hispanics in New York City rose dramatically, from 89,400 to 361,800, an increase of 272,500 or 305 percent.[1] This represents a jump from just 5 percent of all Hispanics in 1990 to 17 percent in 2000 (Figure 2). This pattern was also evident across the country. Nationally, the number of unspecified Hispanics grew from 1.40 million in 1990 to 5.54 million in 2000 (data not shown); their share rose from 6 percent of all Hispanics in 1990 to 16 percent in 2000.

Sociologists and demographers have speculated that the large jump in unspecified Hispanics may be indicative of an increase in a pan-ethnic Hispanic identity, a result of assimilation that occurs over extended periods of time as Hispanics identify more closely with the general Hispanic population rather than their specific subgroup (Cohn, 2001; Scott, 2001). This explanation, however, does not reflect the Hispanic experience in New York City where many subgroups are relatively recent entrants, and thus more likely to identify with their subgroup. In the last decade, while the Hispanic population of the city grew by 426,200, from 1.72 million in 1990 to 2.15 million in 2000, the share that was foreign-born increased from 35 percent to 41 during this period. Moreover, 44 percent of foreign-born Hispanics in the city were recent arrivals, having first entered the U.S. between 1990 and 2000. In addition, the residential settlement patterns of unspecified Hispanics seem to follow the spatial distribution of write-in Hispanics much more closely than that of check-off Hispanics (Figure 3). Of New York City's 775 census tracts that were the most heavily Hispanic[2], 282 tracts had higher than average percentages of both write-in Hispanics and unspecified Hispanics. These tracts have settled large inflows of recent immigrants from the Dominican Republic and South America. Only 87 tracts held higher than

average percentages of both the check-off subgroups and unspecified Hispanics, with these tracts being more spatially dispersed, often in neighborhoods that were transitioning from Puerto Rican to Dominican.[3] The fact that unspecified Hispanics displayed a marked propensity to co-reside with some of the newest immigrants in the city poses serious challenges to the explanation that acculturation accounts for the jump in the number of persons who identified themselves as Hispanic but who chose not to specify their subgroup.

In an effort to get a better idea about the reasons for the dramatic rise in the number of unspecified Hispanics, the Census Bureau turned to the Alternate Questionnaire Experiment (AQE). Conducted during Census 2000, the AQE consisted of mailing 1990 census short-forms to a random sample of 10,500 households and comparing these results with those from a survey of 25,000 randomly selected households that received a 2000 census-style form (del Pinal et. al., 2002). The results suggested that the request to "Print group" after checking-off the box for Other Spanish/Hispanic/Latino was interpreted by some to mean that they should indicate whether they were literally Spanish, Hispanic, or Latino -- the choices offered in the question. Out of this test, a consensus emerged that the increase in the number of unspecified Hispanics was primarily due to the change in question wording.

Objectives and Data

Recognizing a marked shortfall in the size of Hispanic subgroups, researchers have employed methods to create revised estimates of the decennial census numbers. Prior to release of the Public Use Microdata Sample (PUMS), researchers relied on distributions of Hispanics by subgroup from other surveys as a means of creating more accurate subgroup numbers by allocating some portion of unspecified Hispanics. Using pooled data from the March 1998 and 2000 Current Population Survey (CPS) samples, an interviewer-administered survey, Logan (2002) created revised estimates for the nation, states, and major metropolitan areas. The percent of unspecified Hispanics in each census tract was compared to a benchmark number, representing an estimate of the "true" percent of unspecified Hispanics for the metropolitan area, and when the total for unspecified Hispanics exceeded the threshold, the difference was allocated based on the known distribution of Hispanic subgroups in that tract. The use of an interviewer-administered instrument and a question presumably not affected by the limitations found in the 2000 census probably does enhance the CPS's capacity to better identify detailed Hispanic subgroup members. At the same time, the CPS sample is generally inadequate for generating estimates for small geographic areas; moreover, metropolitan areas with a great deal of geographic variability may not find thresholds from the CPS appropriate at lower levels of geography.

Suro (2002) used data from the Census 2000 Census Supplementary Survey (C2SS) for Hispanic subgroups as a way of revising the 2000 census numbers. The C2SS is a mail-out/mail-back survey with telephone and nonresponse follow-up. Despite the fact that the questions on the C2SS and the census were the same, Suro argued that more contact with interviewers in the C2SS, in the form of telephone and in-person follow-up, resulted in improved subgroup identification. Revised subgroup numbers were created by substituting the Hispanic subgroup

distribution in the census with that from the C2SS. While the different data collection methods probably do result in an enhanced capacity of the C2SS to identify subgroup members, the fact remains that this method is limited, to the extent that C2SS mail returns are subject to the same problems as the census question. Further, using C2SS distributions as a basis for revising subgroup estimates is limited to places with large sample sizes, such as big states and large cities.

The New York City Department of City Planning (2002) created preliminary estimates of Hispanics in New York City by reallocating unspecified Hispanics based on the 1990 census distribution. Using the percentage of Hispanics with an unspecified subgroup in 1990, the number of "expected" unspecified Hispanics was calculated in 2000. The difference between the reported number of unspecified Hispanics in 2000 and the expected number was then apportioned to the write-in subgroups based on their 2000 distribution. This was done for New York City, its five boroughs, and 2,217 census tracts. Of course, the main limitation here is the assumption that the true percentage of unspecified Hispanics was the same in both 1990 and 2000.

With the release of the 2000 Census PUMS, it is now possible to move beyond the assumptions involved in the use of aggregate distributions from other surveys. Additional variables from the census long-form sample can be mined to more directly allocate unspecified Hispanics into their respective subgroups. The Census Bureau has completed a simulation using its internal files for all long-form cases and has issued "unofficial" revised numbers for all Hispanic subgroups (Cresce and Ramirez, 2003). Using data on birthplace and ancestry, in that order, they were able to reduce the number of unspecified Hispanics by 54 percent. The totals for write-in subgroups increased substantially, with Dominicans increasing by 25 percent, while Ecuadorians and Colombians increased by 39 percent and 32 percent, respectively (data not shown). On the other hand, increases for check-off subgroups were much lower, between five and seven percent.

In this analysis, we use the PUMS files and the Census Bureau's allocation method to estimate the true size of Hispanic subgroups in 2000 for New York City. First, we identify respondents who checked-off *other Spanish/Hispanic/Latino* but did not write-in a Hispanic subgroup, about 361,800 persons (Table 1). This figure includes persons who wrote-in Spanish, Hispanic, or Latino, as well as those who did not write-in anything. To this total, we added another approximately 11,400 respondents who designated themselves as South American or Central American, but provided no information on subgroup affiliation. All told, there were 373,300 persons who did not specify a Hispanic subgroup that we attempted to reallocate by using information on birthplace, first ancestry, and second ancestry. This simulation assumes that respondents in the census sample who failed to write-in a specific subgroup affiliation to the question on Hispanic origin would provide valid responses to question 12, "Where was this person born?" and to question 10, "What is this person's ancestry or ethnic origin?"[4] (Unlike question 5 on Hispanic origin, the ancestry question provides many sample responses, one of which is Dominican). This allocation procedure largely follows the Census Bureau's algorithm, yielding a new set of Hispanic subgroup numbers for New York City.

Having done the allocation, the second task is to evaluate whether the demographic and socioeconomic characteristics of subgroups change significantly as a result of including these additional subgroup members. We thus create a socio-demographic profile for the original subgroups (reported estimates) and for subgroups with the additional subgroup component (revised estimates), to examine just how different the profile might be when the subgroup derived through indirect means is included as part of an Hispanic subgroup. To further understand this relationship, the characteristics of one such group, the Dominicans, are compared for two different neighborhoods in New York City, to evaluate how reported profiles compared with revised profiles in different parts of the city.

Revising the Estimates of the Hispanic Subgroups: A New Picture of 1990-2000 Change

There were more than 2.15 million Hispanics enumerated in New York City as part of the 2000 census (Table 1), with unspecified Hispanics numbering 361,800, or 17 percent of all Hispanics. After applying the Census Bureau's allocation method, using data on place of birth and ancestry from the five percent PUMS file, the number of unspecified Hispanics declined, to 104,900, or 5 percent of the Hispanic population. Overall, the number of unspecified Hispanics declined by 71 percent;[5] a similar percentage decline occurred for Other Central Americans, while the number of Other South Americans declined less dramatically (27 percent).[6]

There were marginal increases in the revised numbers of the check-off Hispanic subgroups: Mexicans rose by three percent, Puerto Ricans by four percent, and Cubans by eight percent. The largest absolute increases between the original reported numbers and the revised numbers were for the write-in subgroups. Dominicans saw the largest increase, from 427,800 to 530,600, a jump of 102,800 persons or 24 percent. Ecuadorians increased by 39,400 (39 percent) and Colombians increased by 24,500 (31 percent).

Given their smaller size, absolute increases among most other write-in subgroups were more modest, but relative changes were substantial. Hondurans increased by 11,800 persons or 41 percent, to 40,400 persons in 2000; Salvadorans increased 34 percent, to 31,800 persons; Peruvians increased 31 percent, to 33,200; Guatemalans increased 38 percent, to 22,700; and Panamanians increased 25 percent, to 23,900.

The size and share of the major Hispanic subgroups appear in Figure 2, which shows the 1990 census numbers, as well as the 2000 census reported and revised figures. For the three check-off (Mexican, Puerto Rican and Cuban) subgroups, the picture of change between 1990 and 2000 remained largely the same, regardless of whether the 2000 reported or revised numbers were used. For example, Mexicans grew from 57,300 in 1990 to 180,500 reported in 2000; an increase of 123,200; using the revised Mexican number for 2000 (186,300), the Mexican increase would have been slightly higher, at 129,000. In terms of their share of the Hispanic population, Mexicans made up three percent of all Hispanics in New York City in 1990; in 2000 that number was between eight and nine percent using either the reported or revised figures. With respect to Puerto Ricans, they showed a decline of 73,900 persons, from 851,300 in 1990 to 777,400 in 2000; using the revised Puerto Rican number of 808,800 in 2000, yields a slightly lower decline

of 42,500. In terms of their share of the Hispanic population, Puerto Ricans represented 49 percent of all Hispanics in 1990; this declined to 36 percent according to the reported numbers, and to 38 percent based on the revised figures. The share Cubans comprised of all Hispanics was similar (around 2 percent) using either the reported or revised numbers in 2000.

In contrast to the check-off subgroups discussed above, the absolute change over time for the write-in subgroups varied greatly, depending on the use of either the reported or revised numbers (Figure 2). Dominicans and South Americans (principally immigrants from Ecuador and Colombia) showed much sharper increases over 1990 when the revised estimates were used. The Dominican population increased from 328,600 in 1990 to a reported 427,800 in 2000, an increase of 99,200. Using the revised numbers, the Dominican population increased by 202,000 over the decade, to 530,600 in 2000. Similarly, the share Dominicans comprised of all Hispanics in 2000 increases from 20 percent to 25 percent, depending on whether the reported or revised numbers are used. With respect to South Americans and Central Americans, the use of reported numbers show minimal change in the 1990s. The revised numbers, however, reveal a growing South American population, increasing from 219,700 in 1990 to 321,300 in 2000. The share of Hispanics in 2000 who are South American increases from 11 percent to 15 percent, depending on whether the reported or revised numbers are used. The revised numbers show the Central American population increasing by 37,700, from 99,900 in 1990, to 137,600 in 2000; the reported number of Central Americans in 2000 was only 106,600. Finally, after incorporating the revised numbers into the comparisons, the share of unspecified Hispanics remained about the same in 1990 and 2000, at five percent of all Hispanics.

Given the sizable changes in subgroups totals, it is important to ask how the revised numbers affect the demographic and socioeconomic characteristics of these subgroups. Are the characteristics of those who have been added to a subgroup in the simulation process different enough to change the characteristics of the subgroup as a whole? The next section of the analysis directly addresses concerns, described earlier, that the use of the subgroup data as reported in the 2000 census may not provide an accurate view of Hispanic subgroup characteristics.

Characteristics of Specified Hispanic Subgroups: The Revised Picture

In an effort to evaluate how the characteristics of a subgroup may have changed with the revised population numbers, profiles were constructed, each with key data items that are important for local data applications. Socio-demographic estimates are presented for the reported subgroup population (*reported* estimates), for unspecified Hispanics who are allocated to a subgroup based on their birthplace or ancestry (*added*), and for the revised subgroup population (*revised* estimates). These data items are presented for the three largest write-in subgroups in New York City: Dominicans, Ecuadorians, and Colombians.

Overall, there were few significant differences in characteristics between the reported members of a subgroup and those who were added to the subgroup by way of the simulation. More importantly, reported socio-demographic estimates for a subgroup were not significantly different from the revised estimates.

For Dominicans and Ecuadorians, the added subgroups were significantly younger than the reported subgroups. Among added Dominicans, 37 percent were under the age of 18, compared to 29 percent of reported Dominicans; for Ecuadorians, 27 percent of the added subgroup was under 18, compared to 20 percent of reported Ecuadorians (Table 2). There were also significant differences in median age and nativity among Dominicans: the median age of the added Dominican subgroup was four years younger than that of reported Dominicans, and the former also had a significantly lower percentage of foreign-born.

While these differences are notable, the key issue is whether the added subgroup results in significant differences in socio-demographic estimates between the reported and revised subgroup populations. Table 2 shows that the differences between the reported and the revised estimates are not significant for Dominicans. For example, an almost eight percentage point difference in the share of those under 18 years, between those who were added and those who were originally reported, translates into an under two percentage point difference when the reported and revised totals are compared. The difference in median age follows a similar pattern. Among Ecuadorians as well, there was also no significant difference in the percent under 18 between the reported and revised populations. Since differences in the socio-demographic characteristics between the reported and added subgroups were generally modest, characteristics of the revised population were not significantly different from those of the reported population.

With respect to labor force participation rates, there were no significant differences between reported and added Colombians; however, Dominican and Ecuadorian labor force participation rates were significantly higher for the reported subgroup relative to the added subgroup. For Dominican men, the participation rate was 62 percent for the reported subgroup, compared to 51 percent for those who were added through the simulation; for women, the rates were 49 and 43 percent, respectively. Among Ecuadorian males, almost three-quarters of the reported population was in the labor force, compared to 56 percent of the added subgroup, a gap of 17 points; rates for Ecuadorian women were 51 percent and 42 percent, respectively. Nevertheless, the reported estimates were not significantly different from the revised estimates. Thus despite significant differences in labor force participation between the added and reported subgroups, these differences were not large enough to significantly change the estimates of the reported subgroups.

For all other characteristics examined in Table 2, none of the differences, either between the reported and added subgroups, or between the reported and revised subgroups were statistically significant.[7]

A Look at the Neighborhood Level

One key question for local data users remains. It concerns whether the absence of significant differences in characteristics between the reported and revised subgroups observed at the citywide level, holds up for individual neighborhoods. A case study was constructed for two Dominican neighborhoods in different boroughs of New York City. The first area, shown in a

map accompanying Table 3, is the University Heights-Highbridge neighborhood of the West Bronx, across the Harlem River from Manhattan. This is a very dense area of the Bronx, characterized by large buildings with an abundance of renter-occupied housing units. This neighborhood has high levels of public assistance recipiency and a relatively poor socioeconomic profile. Corona, in Queens, another Dominican stronghold, is a very different neighborhood. Adjacent to Flushing Meadows Park, Corona is characterized by smaller buildings, higher levels of owner-occupancy, and an income level above that of its Bronx counterpart (though below the city median).

Table 3 provides a profile for the reported and the revised Dominican subgroups in these two neighborhoods.[8] In the University Heights-Highbridge neighborhood, there were 54,500 reported Dominicans; the revised number was 70,000. For Corona, reported Dominicans numbered 31,000, and the revised figure was 39,000. In both neighborhoods, analyses of demographic and socioeconomic characteristics for the reported and revised subgroups yielded similar profiles, with only one variable, *percent under 18 years*, having a difference of at least two percentage points. None of the differences in the socio-demographic characteristics between the reported and the revised subgroups in either neighborhood were statistically significant.

Conclusion: A Final Look

There is little doubt that the count of write-in Hispanic subgroups was understated in the 2000 census. Given the diverse nature of its Hispanic population, this shortfall affected New York City in a major way. After utilizing an algorithm to reclassify unspecified Hispanics based on birthplace and ancestry, big increases were seen in the number of Dominicans (up by 24 percent), Ecuadorians (39 percent), and Colombians (31 percent), New York City's largest Hispanic write-in subgroups. These increases have real-life implications for allocation of resources at the local level.

The shortfall of certain specific Hispanic subgroups creates a dilemma for those who need to use current census data to describe characteristics because the subgroups in the census Summary Files represent a subset of a much larger number for each subgroup. The key question concerns whether use of the subset seriously biases estimates of characteristics for the whole subgroup. This research suggests that subgroups added by the simulation and the original reported subgroups have, for the most part, similar demographic and socioeconomic profiles. This case is made stronger when the spatial distributions are examined for those who reported a subgroup and those who had their subgroup imputed. For Dominicans (Figure 4), Ecuadorians (Figure 5), and Colombians (Figure 6), the spatial distribution of the reported subgroup and the added subgroup are virtually identical. The maps depict the relative share of each subgroup in 55 geographic areas.[9] The similarity in the spatial distribution of the reported subgroup (on the left) and the added subgroup (on the right) is striking.

While a few characteristics of the added subgroups were significantly different from those of the original reported subgroups, these differences were modest. For each of the variables in the profile, covering age, sex, nativity, English proficiency, education, labor force, poverty,

household/family type, housing characteristics, and household income, the added subgroup was neither large enough nor different enough to have a statistically significant impact on the original profile of the subgroup. As a result, the characteristics of the revised population were not significantly different from those of the reported population. This suggests that the use of reported characteristics in the Summary Files is an adequate representation of the characteristics for each subgroup.

There is no way of knowing whether our findings would be replicated for Hispanics in other subgroups or in smaller neighborhoods, since sample size issues would prohibit comparisons for smaller subgroups and smaller neighborhoods. Given its access to the full one-in-six sample, however, the Census Bureau is in a position to determine such effects for other subgroups and small areas of the nation. Indeed, the Census Bureau should consider creating a special 2000 file for census tracts or other geographic areas (e.g., areas that exceed some threshold of Hispanic persons), that provides revised numbers for Hispanic subgroups and selected characteristics for these revised groups. While this supplemental file would not replace the existing census data, it would provide users with an option that is currently out of their reach and help advance Hispanic-related research.

Endnotes

[1] In this study, unless specified otherwise, tabulations for 2000 are from the five percent Public Use Microdata Sample file. As such, the number of persons in each of the Hispanic subgroups will differ from those reported in the full count census tabulations.

[2] These were tracts with at least 100 Hispanics who comprised at least 25 percent of the total population.

[3] Of the three "check-off" groups, Puerto Ricans (777,400) were dominant in most places, since the Mexican and Cuban populations were far smaller at 180,500 and 42,800, respectively.

[4] We examined place of birth, first ancestry, and second ancestry responses (in that order) for persons who entered a response classified as Unspecified Hispanic, Other Central American, and Other South American. Based on the responses to these items, persons were placed into a specific Hispanic subgroup. This method has several limitations: we did not reduce the Hispanic total if someone failed to report a Hispanic response in the birthplace or ancestry; conversely, we did not add in any persons who failed to report themselves as Hispanic in question 5 (the Hispanic question), but did report Hispanic responses in the birthplace and ancestry questions.

[5] This compares with a 54 percent decline achieved by the Census Bureau (See Cresce and Ramirez, 2003:11).

[6] The simulation used to create revised numbers of Other Central Americans and Other South Americans was slightly different in this study, compared to that used by Cresce and Ramirez, 2003. Our simulation permitted unspecified Hispanics, who had a birthplace or ancestry of Central American or South American, to be added to these two categories. This tempered the declines among Other South Americans and Other Central Americans.

[7] In addition to the three subgroups described in this analysis, data were also compiled for Hondurans and Salvadorans. While the number added by way of the simulation was relatively large for both subgroups (see Table 1), no significant differences were found between the revised and reported socio-demographic profiles.

[8] Because of sample size issues, no attempt was made to evaluate differences for the added group separately.

[9] The 55 subareas are Public Use Microdata Areas (PUMA). These areas are required to have a minimum of 100,000 persons and were designed to reflect major neighborhood boundaries and areas used by local government to evaluate needs and deliver services.

Bibliography

Cohn, D'Vera. 2001. "Shifting Portrait of U.S. Hispanics." The Washington Post, May 10, 2001.

Cresce, Arthur R. and R.R. Ramirez. 2003. "Analysis of General Hispanic Responses in Census 2000." Working Paper No. 72. Washington, DC: U.S. Census Bureau.

del Pinal, Jorge, E. Martin. C. Bennett and A. Cresce. 2002. "Overview of Results of New Race and Hispanic Origin Questions in Census 2000." Paper Presented at the Joint Statistical Meetings, New York, August.

Lobo Arun Peter, Ronald Flores, and Joseph Salvo. 2002. "The Impact of Hispanic Growth on the Racial/Ethnic Composition of New York City Neighborhoods," *Urban Affairs Review*, Vol. 37, No. 5.

Logan, John R. "Hispanic Population and Their Residential Patterns in the Metropolis. 2002. Albany, NY: Mumford Center for Comparative Urban and Regional Research.

New York City Department of City Planning. 2002. "Demographic/Household Characteristics & Asian and Hispanic Subgroups." DCP#02-07, http://nyc.gov/html/dcp/pdf/census/nyc20002.pdf

Scott, Janny. 2001 "A Census Query Is Said to Skew Data on Latinos." The New York Times, June 27, 2001.

Suro, Roberto. 2002. "Counting the "Other Hispanics": How Many Colombians, Dominicans, Ecuadorians, Guatemalans and Salvadorans Are There in the United States?" Washington, DC: Pew Hispanic Center.

U.S. General Accounting Office. 2003. "Methods of Collecting and Reporting Hispanic Subgroup Data Need Refinement." GAO-03-228, Washington DC.

Table 1
Reported and Revised Estimates[1] of Hispanic Subgroups
New York City, 2000

	Reported		Revised		Added (Change from Reported to Revised)	
	Number	Percent	Number	Percent	Number	Percent Change
Total, Hispanic	2,150,965	100.0	2,150,965	100.0	-	0.0
Mexican	180,473	8.4	186,250	8.7	5,777	3.2
Puerto Rican	777,402	36.1	808,813	37.6	31,411	4.0
Cuban	42,802	2.0	46,254	2.2	3,452	8.1
Dominican	427,788	19.9	530,603	24.7	102,815	24.0
Central American	106,594	5.0	137,568	6.4	30,974	29.1
Costa Rican	5,361	0.2	6,718	0.3	1,357	25.3
Guatemalan	16,529	0.8	22,744	1.1	6,215	37.6
Honduran	28,564	1.3	40,351	1.9	11,787	41.3
Nicaraguan	7,726	0.4	10,406	0.5	2,680	34.7
Panamanian	19,073	0.9	23,881	1.1	4,808	25.2
Salvadoran	23,697	1.1	31,833	1.5	8,136	34.3
Other Central American	5,644	0.3	1,635	0.1	(4,009)	-71.0
South American	243,499	11.3	321,279	14.9	77,780	31.9
Argentinean	10,540	0.5	12,745	0.6	2,205	20.9
Bolivian	3,483	0.2	4,771	0.2	1,288	37.0
Chilean	6,273	0.3	8,211	0.4	1,938	30.9
Colombian	80,457	3.7	104,961	4.9	24,504	30.5
Ecuadorian	101,604	4.7	140,973	6.6	39,369	38.7
Peruvian	25,411	1.2	33,208	1.5	7,797	30.7
Uruguayan	1,920	0.1	2,464	0.1	544	28.3
Venezuelan	8,016	0.4	9,706	0.5	1,690	21.1
Other South American	5,795	0.3	4,240	0.2	(1,555)	-26.8
Spaniard	10,572	0.5	15,302	0.7	4,730	44.7
Unspecified Other Hispanic	361,835	16.8	104,896	4.9	(256,939)	-71.0

[1] The reported estimate consists of "check-off" and "write-in" responses for specific subgroups on the Hispanic question. The revised estimate is the reported estimate plus an added component for those who did not report a specific subgroup in the Hispanic question, but reported a specific group for birthplace or ancestry.

Source: 2000 Census, Public Use Microdata Sample Five Percent File

Population Division
New York City Department of City Planning

Table 2
Reported and Revised Socio-demographic Estimates[1] for Selected Hispanic Subgroups[2]
New York City, 2000

	Dominicans					Ecuadorians					Colombians				
				Differences					Differences					Differences	
	Reported	Added	Revised	Added minus Reported	Revised minus Reported	Reported	Added	Revised	Added minus Reported	Revised minus Reported	Reported	Added	Revised	Added minus Reported	Revised minus Reported
Total Population	427,788	102,815	530,603	-	-	101,604	39,369	140,973	-	-	80,457	24,504	104,961	-	-
Age															
Percent Under 18 Years	29.0	36.6	30.5	7.6*	1.5	20.1	26.6	21.9	6.5*	1.8	21.0	26.0	22.2	4.9	1.2
Percent 18 to 44	47.5	43.2	46.6	-4.3*	-0.8	56.4	50.5	54.8	-5.8*	-1.6	50.4	41.9	48.4	-8.5*	-2.0
Percent 45 to 64	18.4	15.4	17.8	-3.0*	-0.6	18.5	17.0	18.1	-1.5	-0.4	22.2	24.8	22.8	2.7	0.6
Percent 65 and Over	5.1	4.8	5.0	-0.3	-0.1	5.0	5.8	5.2	0.8	0.2	6.4	7.3	6.6	0.9	0.2
Median Age	30	26	29	-4*	-1	31	31	31	0	0	35	35	35	0	0
Sex															
Percent Female	53.2	55.2	53.6	2.0	0.4	46.0	49.1	46.9	3.1	0.9	57.2	54.9	56.7	-2.3	-0.5
Nativity															
Percent Foreign-born	69.0	64.6	68.2	-4.4*	-0.9	78.4	74.0	77.2	-4.4	-1.2	77.2	73.4	76.3	-3.8	-0.9
Ability to Speak English															
Population 5 Years and Over	372,671	86,314	458,985	-	-	90,881	34,972	125,853	-	-	72,131	21,576	93,707	-	-
Percent Not Proficient	61.7	62.0	61.8	0.3	0.1	64.8	64.0	64.6	-0.8	-0.2	60.8	65.4	61.9	4.6	1.1
Education															
Population 25 Years and Over	250,879	53,379	304,258	-	-	67,499	24,498	91,997	-	-	55,073	16,374	71,447	-	-
Percent Less than High School	53.4	57.6	54.1	4.2	0.7	44.6	47.9	45.5	3.3	0.9	33.2	37.8	34.3	4.5	1.0
Percent High School Only	19.3	18.5	19.2	-0.8	-0.1	25.7	24.8	25.5	-0.9	-0.2	26.3	28.5	26.8	2.2	0.5
Percent College Grad or More	8.6	6.9	8.3	-1.7	-0.3	9.5	8.7	9.3	-0.8	-0.2	18.0	11.6	16.5	-6.4	-1.5
Labor Force															
Males, 16 and Over	143,275	28,595	171,870	-	-	45,536	15,081	60,617	-	-	27,490	7,967	35,457	-	-
Percent in Labor Force	61.7	50.8	59.9	-10.9*	-1.8	73.2	56.3	69.0	-17.0*	-4.2	70.5	62.3	68.6	-8.2	-1.8
Females, 16 and Over	175,311	40,144	215,455	-	-	38,337	14,846	53,183	-	-	38,246	10,728	48,974	-	-
Percent in Labor Force	49.1	42.9	47.9	-6.2*	-1.1	50.9	41.6	48.3	-9.3*	-2.6	57.2	50.2	55.6	-6.9	-1.5
Poverty															
Poverty Universe	425,234	102,242	527,476	-	-	100,888	39,115	140,003	-	-	79,709	24,400	104,109	-	-
Percent Below Poverty	32.3	34.8	32.8	2.6	0.5	21.6	22.1	21.7	0.6	0.2	19.2	20.9	19.6	1.7	0.4
Household/Family Type															
Total Households	128,166	24,245	152,411	-	-	28,935	9,525	38,460	-	-	26,263	6,478	32,741	-	-
Percent Married Couple	38.7	36.9	38.4	-1.9	-0.3	52.0	59.3	53.8	7.3	1.8	41.6	41.4	41.6	-0.1	0.0
Percent Male Head, no Spouse	8.3	7.5	8.2	-0.8	-0.1	14.4	10.0	13.3	-4.4	-1.1	8.0	11.4	8.6	3.4	0.7
Percent Female Head, no Spouse	37.9	41.6	38.5	3.6	0.6	20.2	17.3	19.4	-2.9	-0.7	25.2	20.9	24.3	-4.3	-0.9
Percent Nonfamily	15.0	14.1	14.8	-0.9	-0.1	13.5	13.5	13.5	0.0	0.0	25.3	26.3	25.5	1.1	0.2
Housing Characteristics															
Occupied Housing Units	128,166	24,245	152,411	-	-	28,935	9,525	38,460	-	-	26,263	6,478	32,741	-	-
Percent Owner-occupied	8.8	7.4	8.6	-1.3	-0.2	16.2	19.6	17.0	3.5	0.9	21.2	19.8	20.9	-1.4	-0.3
Percent in Buildings with 20+ Units	63.8	62.8	63.6	-0.9	-0.1	38.3	34.9	37.4	-3.4	-0.8	47.0	46.0	46.8	-0.9	-0.2
Percent with Rent that is 35% or More of Household Income	39.8	43.0	40.3	3.1	0.5	30.3	35.0	31.4	4.7	1.1	40.0	36.5	39.3	-3.5	-0.7
Median Household Income	$26,000	$24,000	$25,650	-$2,000	-$350	$37,600	$35,000	$37,000	-$2,600	-$600	$36,500	$33,900	$35,700	-$2,600	-$800

* P < .05

[1] The Reported estimate consists of "check-off" and "write-in" responses for specific subgroups on the Hispanic question. The Revised estimate is the Reported estimate plus an Added component for those who did not report a specific subgroup in the Hispanic question, but reported a specific group for birthplace or ancestry.

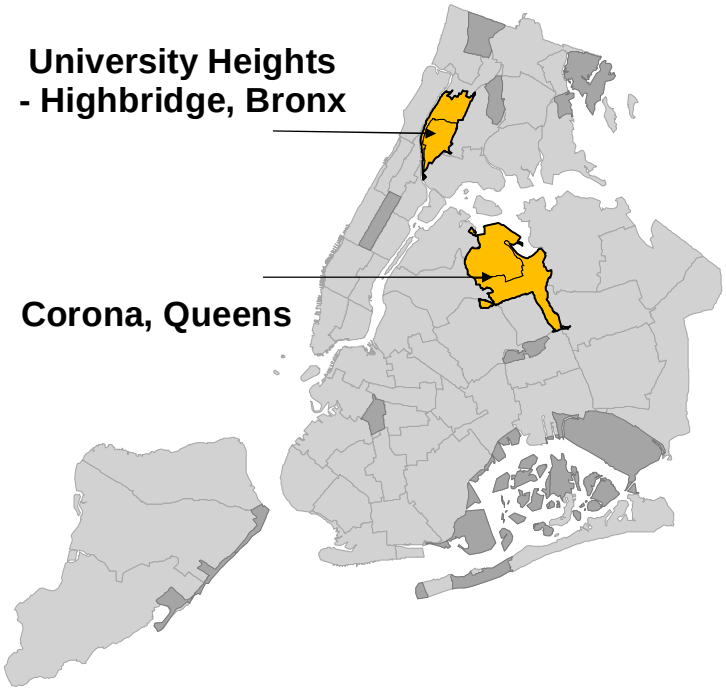
[2] Data are for families and households headed by a member of the designated subgroup.

Source: 2000 Census, Public Use Microdata Sample Five Percent File

Population Division
New York City Department of City Planning

Table 3
Reported and Revised Socio-demographic Estimates[1] for Dominicans[2]
Selected New York City Public Use Microdata Areas (PUMAs), 2000

	University Heights - Highbridge, Bronx			Corona, Queens		
	Reported	Revised	Revised minus Reported	Reported	Revised	Revised minus Reported
Total Population	54,483	69,971	-	31,019	38,965	-
Age						
Percent Under 18 Years	30.7	33.2	2.5	28.4	30.5	2.0
Percent 18 to 44	48.5	47.3	-1.2	47.0	46.6	-0.5
Percent 45 to 64	16.7	15.7	-1.0	19.9	18.3	-1.6
Percent 65 and Over	4.2	3.9	-0.3	4.6	4.7	0.1
Median Age	29	27	-2	30	29	-1
Sex						
Percent Female	53.3	53.5	0.2	53.7	54.4	0.7
Nativity						
Percent Foreign-born	73.7	71.8	-1.9	67.8	66.1	-1.7
Ability to Speak English						
Population 5 Years and Over	46,386	59,228	-	27,698	34,366	-
Percent Not Proficient	70.0	69.8	-0.2	56.5	56.7	0.1
Education						
Population 25 Years and Over	31,305	38,469	-	17,987	22,181	-
Percent Less than High School	58.1	58.1	-0.1	51.1	52.1	1.0
Percent High School Only	16.4	16.9	0.5	23.4	22.8	-0.6
Percent College Grad or More	8.1	7.3	-0.8	7.2	7.0	-0.3
Labor Force						
Males, 16 and Over	17,544	21,368	-	10,548	12,581	-
Percent in Labor Force	60.1	58.6	-1.5	65.2	63.6	-1.6
Females, 16 and Over	22,042	27,624	-	12,825	15,850	-
Percent in Labor Force	46.2	45.9	-0.3	53.5	52.1	-1.5
Poverty						
Poverty Universe	54,189	69,627	-	30,958	38,904	-
Percent Below Poverty	39.3	40.8	1.5	23.9	24.4	0.5
Household/Family Type						
Total Households	17,301	20,383	-	8,648	10,417	-
Percent Married Couple	34.0	34.8	0.8	56.3	54.7	-1.6
Percent Male Head, no Spouse	8.5	8.7	0.3	7.5	7.7	0.3
Percent Female Head, no Spouse	42.2	42.2	0.0	25.0	26.8	1.8
Percent Nonfamily	15.4	14.3	-1.1	11.2	10.8	-0.4
Housing Characteristics						
Occupied Housing Units	17,301	20,383	-	8,648	10,417	-
Percent Owner-occupied	1.9	2.0	0.1	19.4	19.4	0.0
Percent in Buildings with 20+ Units	84.3	83.9	-0.4	29.1	29.7	0.6
Percent with Rent that is 35% or More of Household Income	46.2	46.6	0.4	47.2	47.3	0.1
Median Household Income	$22,000	$21,490	-$510	$30,000	$30,000	$0



[1] The Reported estimate consists of Dominican "write-in" response on the Hispanic question. The Revised estimate is the Reported estimate plus an Added component for those who did not report a specific subgroup in the Hispanic question, but reported the Dominican Republic for birthplace or ancestry.

[2] Data are for families and households headed by a Dominican.

Source: 2000 Census, Public Use Microdata Sample Five Percent File

Population Division
New York City Department of City Planning

Figure 1
Comparison of the Hispanic Origin Question in the 1990 and 2000 Censuses

1990 Hispanic Question:

7. Is this person of Spanish/Hispanic origin?
Fill ONE circle for each person.

- o No (not Spanish/Hispanic)
- o Yes, Mexican, Mexican-Am., Chicano
- o Yes, Puerto Rican
- o Yes, Cuban
- o Yes, other Spanish/Hispanic
  (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)

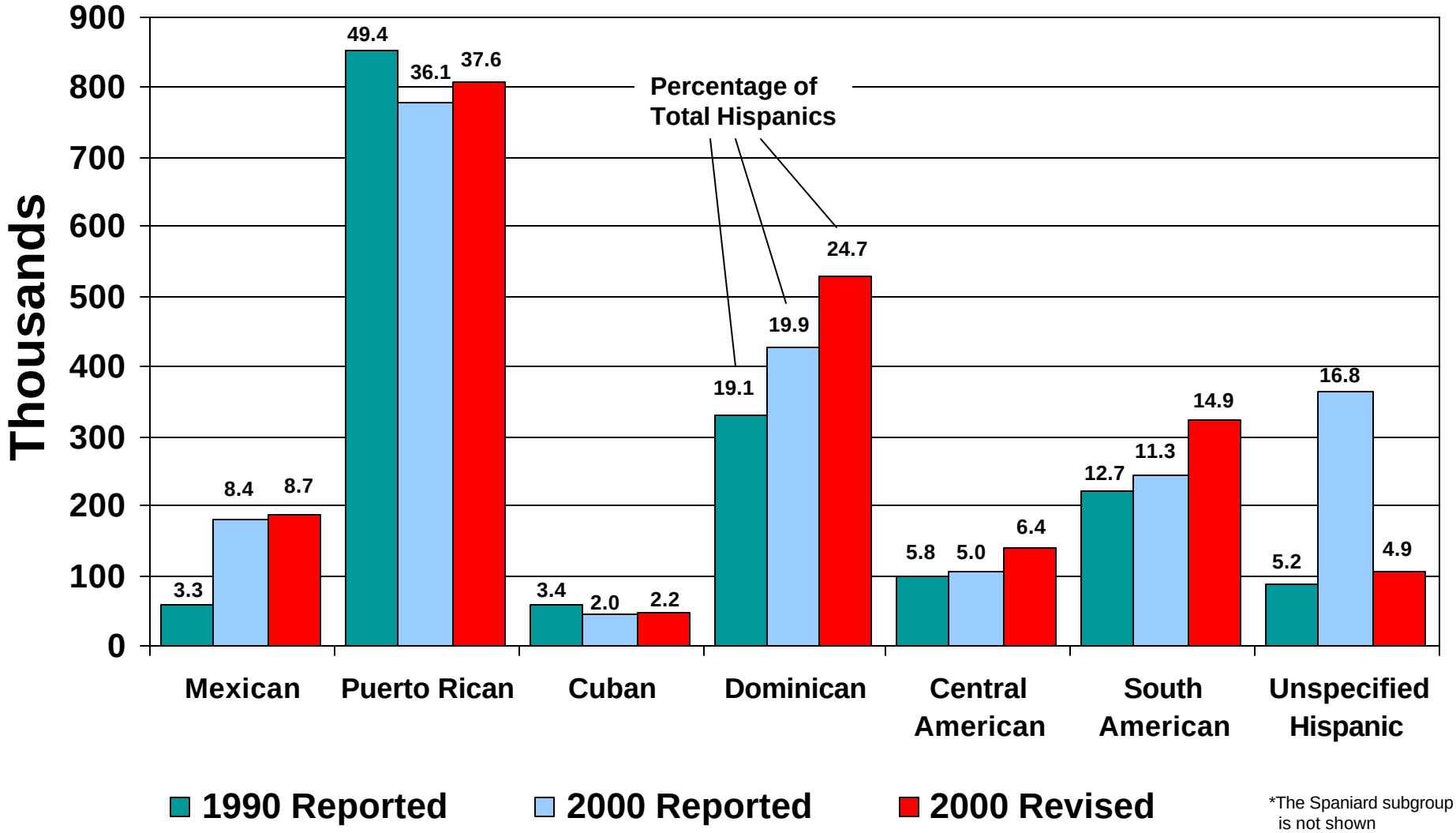
If Yes, other Spanish/Hispanic, print one group. _____

2000 Hispanic Question:

5 **Is this person Spanish/Hispanic/Latino?** *Mark* X *the "**No**" box if **not** Spanish/Hispanic/Latino*

- ❑ **No**, not Spanish/Hispanic/Latino
- ❑ Yes, Mexican, Mexican Am., Chicano
- ❑ Yes Puerto Rican
- ❑ Yes, Cuban
- ❑ Yes, other Spanish/Hispanic/Latino – *Print group*

Figure 2
Hispanic Subgroups* in New York City
Reported in 1990, Reported and Revised in 2000



*The Spaniard subgroup is not shown

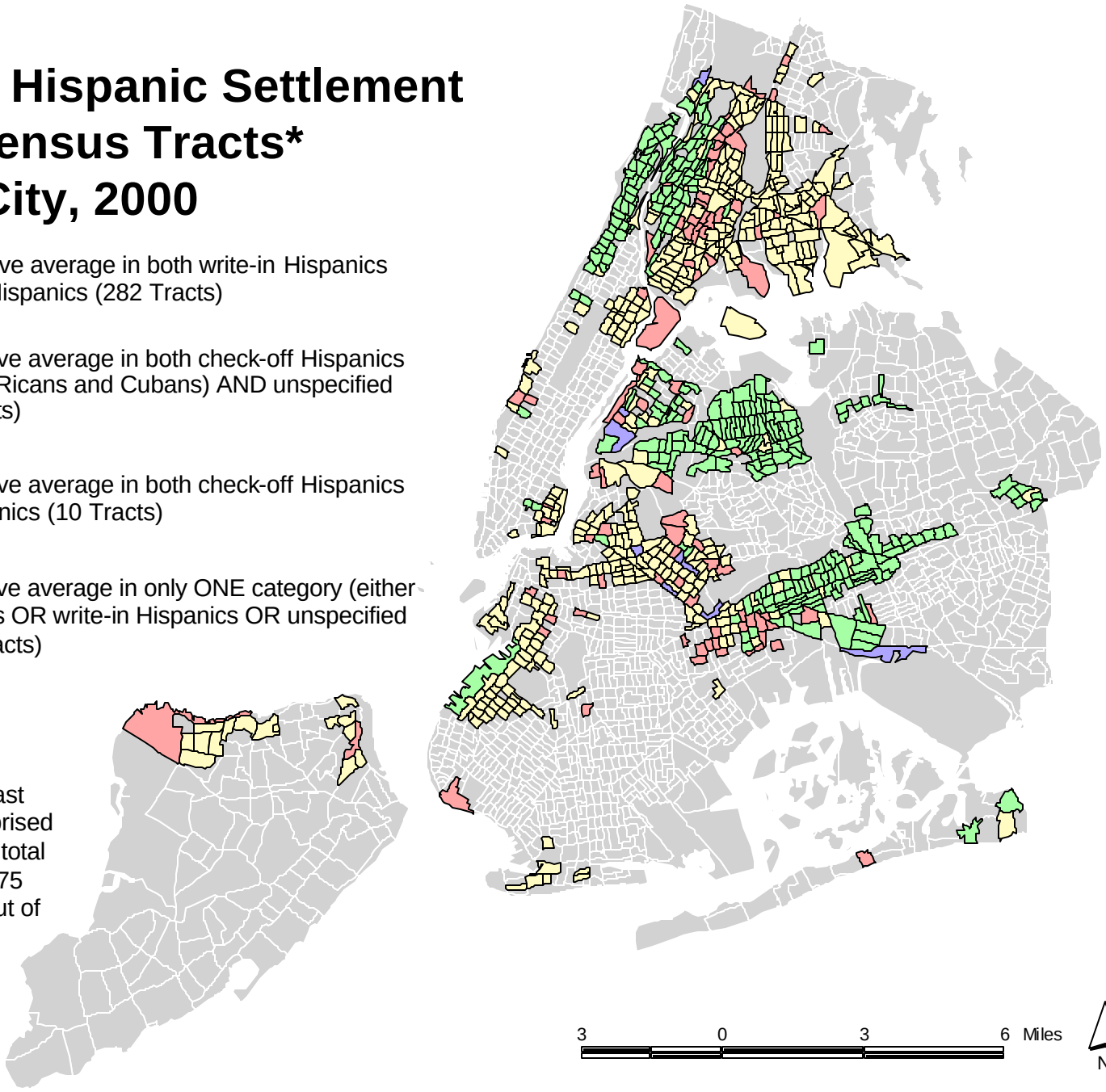
Figure 3
Patterns of Hispanic Settlement
Hispanic Census Tracts*
New York City, 2000

Tracts that are above average in both write-in Hispanics AND unspecified Hispanics (282 Tracts)

Tracts that are above average in both check-off Hispanics (Mexicans, Puerto Ricans and Cubans) AND unspecified Hispanics (87 Tracts)

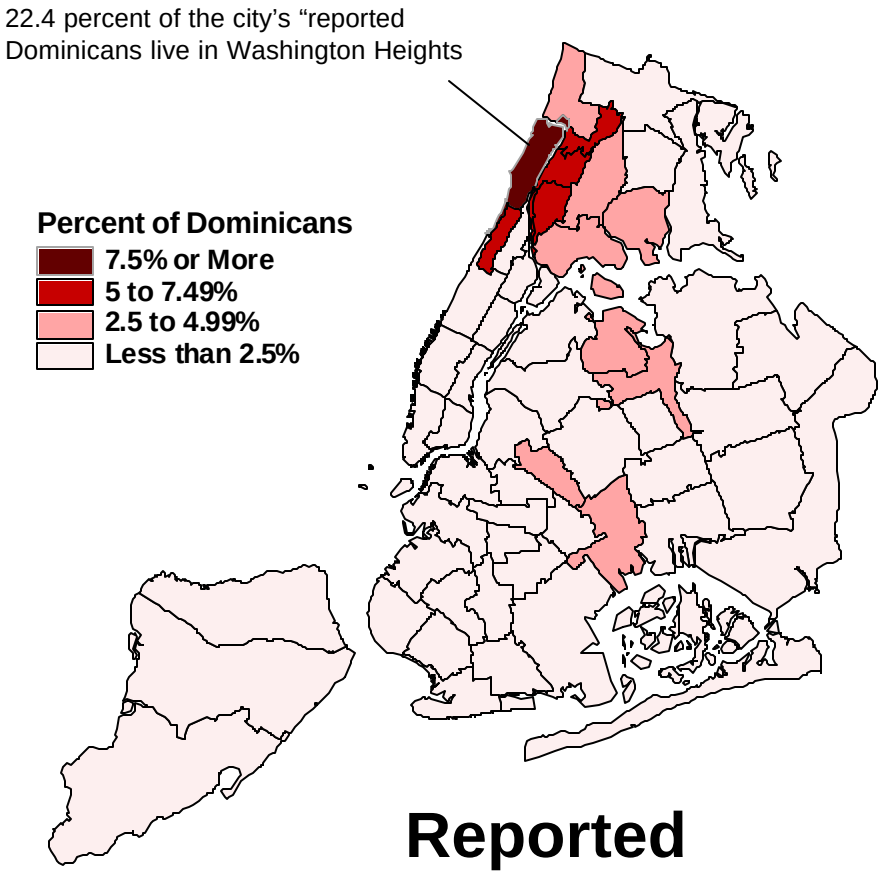
Tracts that are above average in both check-off Hispanics AND write-in Hispanics (10 Tracts)

Tracts that are above average in only ONE category (either check-off Hispanics OR write-in Hispanics OR unspecified Hispanics) (396 Tracts)

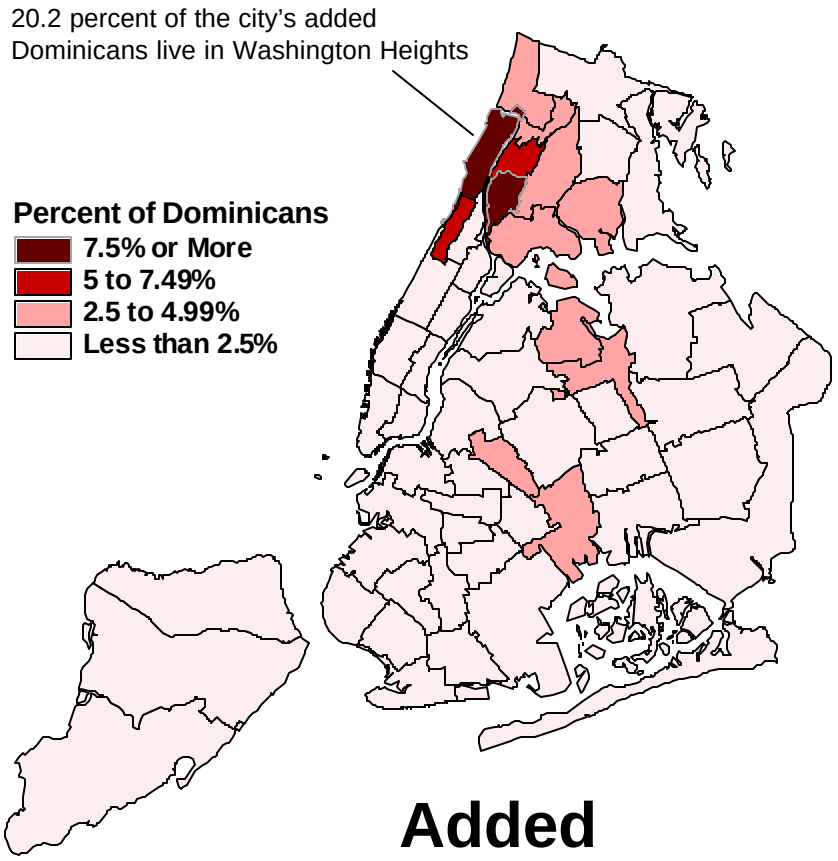


*Census tracts with at least 100 Hispanics who comprised at least 25 percent of the total population. There were 775 Hispanic census tracts out of 2,217 tracts in NYC

Figure 4
Dominicans Reported in the 2000 Census and Added through Simulation
New York City PUMAs

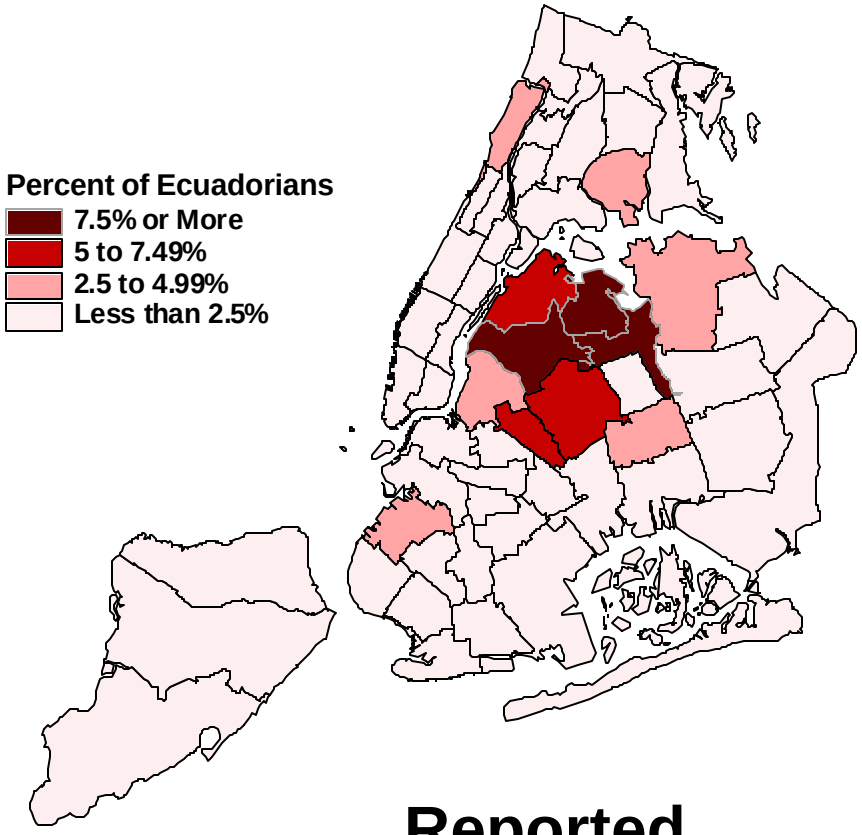


Reported



Added

Figure 5
Ecuadorians Reported in the 2000 Census and Added through Simulation
New York City PUMAs



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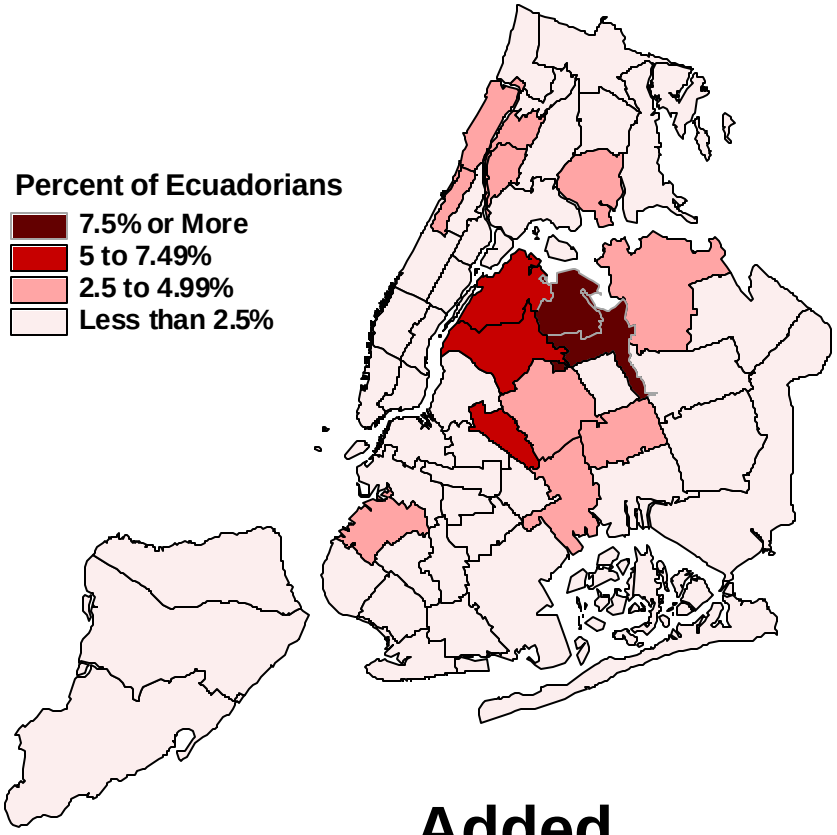
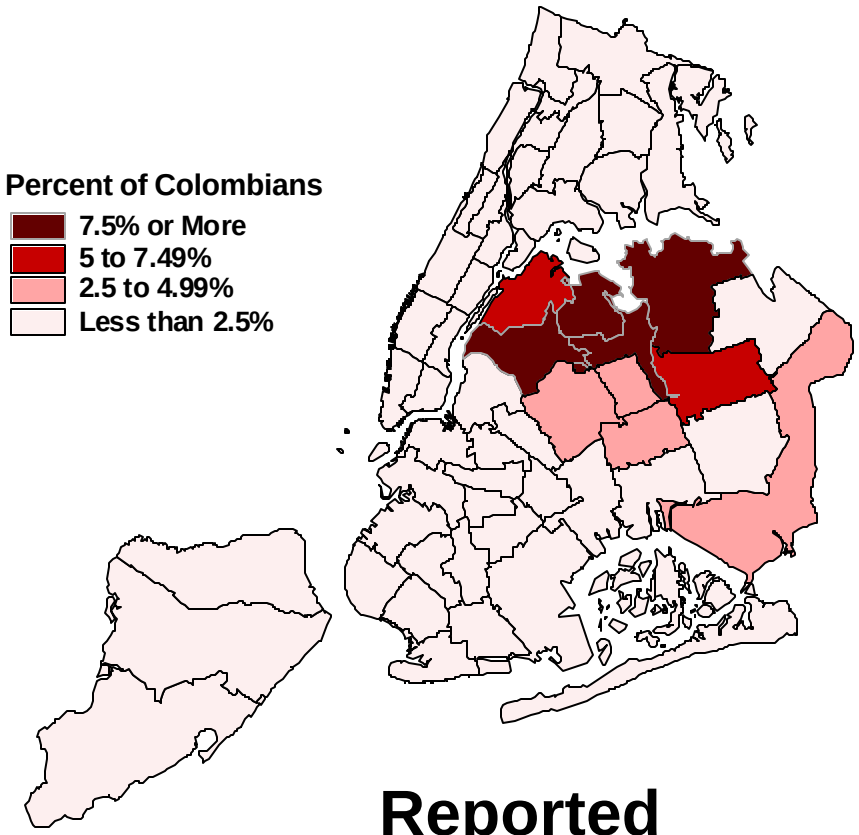
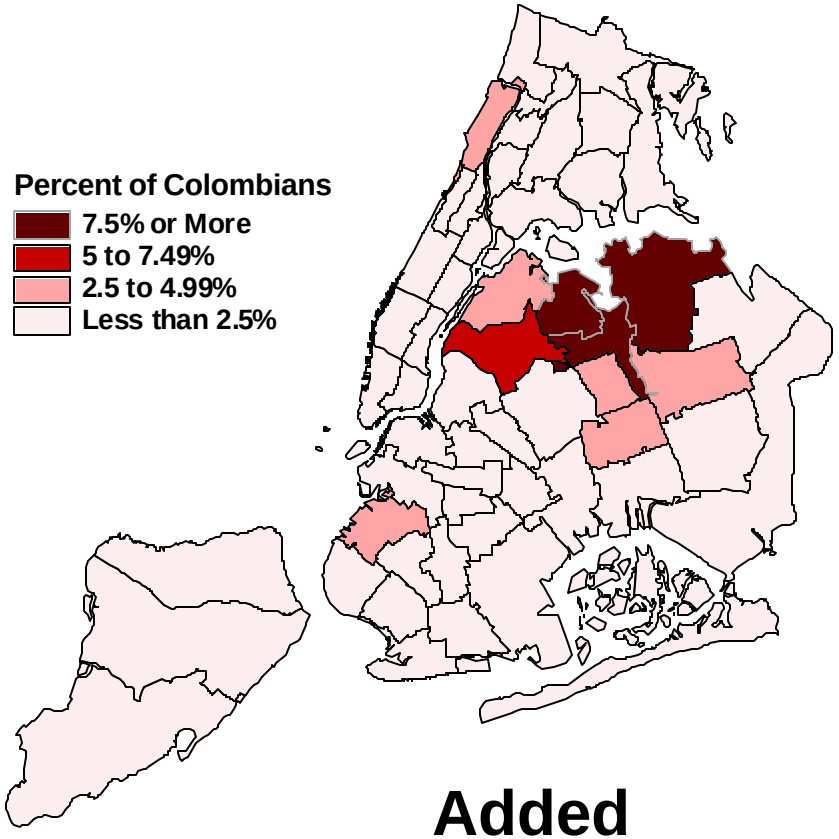


Added

Figure 6
Colombians Reported in the 2000 Census and Added through Simulation
New York City PUMAs



Reported



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