

## OVERVIEW

### Introduction

The New York City Housing and Vacancy Survey (NYCHVS), sponsored by the New York City Department of Housing Preservation and Development, is conducted every 3 years to comply with New York state and New York City's rent regulation laws. The Census Bureau has conducted the survey for the City since 1965. The 2011 NYCHVS is the 15<sup>th</sup> such survey.

Detailed data from the survey cover many characteristics of the City's housing market, including characteristics of the City's population, households, housing stock, and neighborhoods. The rental vacancy rate is the primary focus of the survey, because that value is crucial to the current rent regulation laws. Other important survey data on housing include rent regulatory and homeownership status, structural conditions, unit maintenance and neighborhood conditions; crowding, rents, utility costs, type of heating fuel, rent/income ratios; owner purchase price and estimated value, mortgage status and interest rate; number of stories and units in building, cooperative/condominium status, wheelchair accessibility, and much more about housing and households in New York City.

In addition to housing data, extensive information on characteristics of the population and households occupying housing units is collected, such as age, sex, race, ethnicity, education, household composition, birth region, when/why household moved, income, employment, and labor force status.

Data from the NYCHVS can be useful for planning, program development, policy analysis, research and public information.

### 2011 NYCHVS Sample

Sample units for the 2011 NYCHVS came from two primary sources: 1) the 2010 Decennial Census, and 2) a file of addresses listing all residential units, citywide, issued Certificates of Occupancy for new construction from April 1, 2010 through November 30, 2010. A sample of alterations and conversions covering the period from April 1, 2010 through November 30, 2010, was also added. Additional sample units were drawn from a list of housing units located in structures owned by the city because the owner failed to pay taxes or other charges on the property (*in rem* units). Refer to the Source and Accuracy Statement for more detail.

Approximately 19,000 units throughout the city were selected as a representative sample of the housing in the five boroughs of New York City. Each sample unit represents approximately 170 similar housing units. The Census Bureau attempts to obtain an interview at each sample unit. In the 2011 NYCHVS, the interview rate was 98%.

## **Relationship to the 2010 Census**

Most of the concepts and definitions in the 2011 NYCHVS are the same for similar items that appear in the 2010 Census, and in the American Community Survey (ACS).

The similar questionnaire items from the 2011 NYCHVS and the 2010 Census are household member relationships, race, Hispanic origin, age and sex of household members, and tenure. The 2010 Census was shortened from the 2000 version and included only one housing question, and the long-form questionnaire was eliminated. The Census Bureau fully implemented the American Community Survey (ACS) in 2005 as a means of collecting detailed housing and other demographic characteristics between each decennial census. The similar questionnaire items from the 2011 NYCHVS and the ACS are: year moved in, rooms, bedrooms, plumbing facilities, kitchen facilities, heating fuel, units in structure, housing unit value (for owners), monthly rent, utility costs, condominium/co-op fee, mortgage status, mortgage payment, real estate taxes, fire and liability insurance, education level, labor force characteristics, industry and occupation, and income for household members aged 15 and older.

The 2011 NYCHVS retained nearly all of the questions from the 2008 NYCHVS, albeit with some minor changes (detailed later).

However, there are differences between the 2011 NYCHVS and the 2010 Census/ACS. The differences are in interviewing procedures, staff experience and training, processing procedures, sample design, the sampling variability associated with the NYCHVS and the ACS, and the nonsampling errors associated with the NYCHVS, the Census, and the ACS.

### Sub-borough data

The 2011 NYCHVS is based primarily on a new sample drawn from the 2010 Census, which, for the first time since 1970, did not include the long-form questionnaire. The Census Bureau now uses the American Community Survey (ACS) to collect this additional demographic information on a continuous basis. ACS data for “smaller” areas employs Public Use Microdata Areas (PUMAs) as the basis for examining these smaller geographical areas.

In order to maintain a comparison between NYCHVS and ACS data, the sub-borough areas for NYCHVSs based on the 2010 census have been slightly re-configured to reflect ACS PUMAs. The most notable change from sub-boroughs dating back to the 1991 NYCHVS is in the reassignment of Manhattan tract 309 from the Bronx/sub-borough 6 to Manhattan/sub-borough 10. This tract, known as Marble Hill, is legally in Manhattan, but was tabulated in the Bronx, until now. Other minor changes to sub-borough areas reflect tract boundary changes made by the Census Bureau for the 2010 Census.

## Relationship to Previous NYCHVS Surveys

The 2011 NYCHVS questionnaire, concepts, definitions, and data products are basically the same as those from the 1991, 1993, 1996, 1999, 2002, 2005 and 2008 NYCHVSs. In addition, most of the concepts and definitions in 2011 are similar to those used in NYCHVSs prior to 1991. For more information on previous surveys, see the 1991, 1993, 1996, 1999, 2002, 2005 and 2008 NYCHVS Tabulation Reference Guides and the 1975, 1978, 1981, 1984, and 1987 NYCHVS Notes and Definitions.

Several differences between surveys are worth noting:

- (1) The 2011 NYCHVS is the initial survey based primarily on a sample of housing units from the 2010 Census. There were no operational differences in the manner of conducting the survey. However, as noted, there were some changes to the questionnaire since 2008: a question on receiving energy assistance (HEAP) was added; three new items were added to the rent supplement question – Long Term Stayers Program (LTSP), Housing Stability Plus (HSP), and Family Eviction Prevention Supplement (FEPS); also in terms of rent supplements, the “since when” option for any YES answer was eliminated; a question on the number of employers for a worker was also eliminated; a series of questions on health care postponement due to financial reasons were added; a question on the availability of grab bars in the bathroom for use by any person aged 65 and over, and if any household member age 65 and over has fallen in the house/apartment were also added.
- (2) The 2008, 2005 and 2002 NYCHVS reflected the selection of a new sample based on Census 2000. NYCHVSs taken between 1975 and 1987 were based on a sample from the 1970 Census, while those from 1991 - 1999 were drawn from the 1990 Census. With each new sample design, new weighting and variance estimation procedures are required.
- (3) A new questionnaire was designed in 1991 replacing the design used from 1975 to 1987. The new design resulted in the primary demographic items being asked of all household members rather than for just the householder as was done in the past. Additional maintenance deficiency and structural condition items were added. The 2011 questionnaire is similar to the one used in 1991, 1993, 1996, 1999, 2002, 2005, and 2008.
- (4) Detailed questions on labor force status, industry and occupation, and income level were added in 1991. These items were either not covered in surveys prior to 1991 or covered in a much less detailed manner.
- (5) For 2011, 2008, 2005, 2002, 1999, 1996, and (retroactively) 1993, key items that were not answered were assigned to an answer category in order to reduce non-response. The Census Bureau uses similar

imputation methodology for most of its other demographic surveys. The procedure used is generally referred to as the hot deck approach. This approach assigns values for nonresponses from sample persons and housing units who did respond and who have characteristics similar to the nonrespondents. Some of the characteristics used for imputation include for persons: age, race, worker status, relationship, and education level, and for households: year moved, year acquired, control status, tenure and borough. The items that include imputed responses cover housing, demographic, and economic characteristics from the survey.

- (a) Housing imputation items: year moved-in, year acquired, contract rent, asking rent (vacant units), stories in structure, rooms and bedrooms, type of heating fuel, utility costs (specific), housing unit value, mortgage status, mortgage payment, plumbing facilities, kitchen facilities, and rental assistance/out-of-pocket rent.
- (b) Demographic imputation items: sex, Hispanic Origin, race, age, and education level (persons aged 15 and older).
- (c) Economic imputation items (persons aged 15 and older): labor force status, year last worked, type of business, class of worker, industry/occupation, hours worked, weeks worked, and income.

**Caution should be used when comparing 2011 items with imputed responses with similar items from previous surveys where nonresponses were not imputed, especially 1991 and earlier.**

- (6) In the 1991 NYCHVS, persons of Hispanic origin who did not classify themselves into one of the major race categories were classified as other race. Beginning with the 1996 survey (and retroactively applied to the 1993 data) **all** persons reporting other race were allocated into the major race categories, as were persons not reporting race. These changes were necessitated by new methodologies used to derive independent weighting control estimates for all Census Bureau surveys, and to make procedures used in the NYCHVS consistent with those used in other surveys, such as the Current Population Survey.

As a result, the count of persons and households classified as other race is nonexistent in data for 1993 and onward. There will be a corresponding increase in the number of persons and households classified in the specific race categories (particularly White and Black or African American). **Thus, caution should be used when comparing data on race between the 1991 (and previous) NYCHVSs and later surveys.**

- (7) Beginning with the 1996 NYCHVS, the wording of the question on persons from a temporary residence was changed to focus more specifically on traditional homeless situations.
- (8) Beginning in 1996, the question on receipt of a Senior Citizen Rent Increase Exemption (SCRIE) was incorporated into a more detailed question on whether government programs paid part of the household's rent. The question on receipt of public assistance and welfare payments was also similarly modified. The purpose of these changes was to learn more about the types of assistance households and persons received.

Beginning in 1999, the format of both of these questions was further modified to make each component of the item a separate question rather than to have the respondent answer for all that apply. The purpose of these changes was an attempt to increase the response rate to each component of the items.

In 2008, three new rent subsidy options were added - Jiggetts, Work Advantage/Homeless Housing Program, and Employee Incentive Housing Program (EIHP). In 2011, Long Term Stayers Program (LTSP), Housing Stability Plus (HSP), and Family Eviction Prevention Supplement (FEPS) were added. **As a result, caution should be used when comparing data on rental assistance, and public assistance and welfare payments, between surveys taken prior to 1999 and those taken in 1999 or later.**

- (9) Beginning in 1996, a series of questions on wheelchair-accessibility were added. These items aim to determine whether a wheelchair user would be able to reside in a sample building and the specific sample unit. Like the building condition items, some of these were interviewer-observation items and some were asked of the respondents.
- (10) An additional question on ownership of cooperative shares was added in 1996 in order to ensure a more accurate count of owner-occupied cooperative units. The effect of this new question was to increase the number of owner-occupied and reduce the number of renter-occupied cooperative units, compared to the previous wording.
- (11) Starting in 1999, the two countries India and Mexico became separate response categories in the questions on the last place lived and place of birth. Previously, each was included as part of a grouping of neighboring countries, respectively. In 2005, Canada was added as a separate response category which led to a renumbering of the choices.

- (12) Beginning with 1999, a series of questions on immigration to the United - States and year moved to New York City replaced a set of questions on the previous residence of the householder. Beginning in 2005, respondents who had moved within the City in the previous 5 years were asked which borough and sub-borough they moved from.
- (13) Beginning in 2002, the race question followed the format of Census 2000 in that each person could report more than one racial category. Additionally, the selection of the other category as a response was discouraged as respondents were asked to pick a specific category or categories. **Therefore, use caution when comparing data on race from surveys in 2002 and beyond with surveys prior to 2002.**
- (14) New questions on health were added for 2002. These questions dealt with asthma, smoking, and performing normal daily activities. Two new questions were added on the respondent's perception of the neighborhood. For 2005, the smoking question was modified while the questions on daily activities and neighborhood perception were dropped. New questions were added on smoking in the workplace, coverage and type of health insurance, respondent's rating of own health condition, and availability of a land-line telephone. For 2008, the two smoking-related questions and two health insurance questions were dropped; the question on telephone availability was modified, and a question on cell phone availability was added. A question on observed level of cockroach infestation was also added in 2008.
- (15) Mortgage interest rate and year of origination (for owners) were added in 2005. In addition, the units in structure question changed the response option of 4 or 5 units to two response options of 4 units and 5 units.
- (16) The renter question on whether the respondent knows if the unit is either rent-controlled or rent-stabilized was eliminated in 2008, as was the question on respondent-reported presence of boarded-up buildings in the neighborhood. A question on how many employers each adult had worked for during the prior year was added in that year but dropped in 2011. Also added in 2008 were a question on current school enrollment or training; a series of 10 questions on the cost of routine maintenance and a series of 10 questions on the cost of capital improvements at owner-occupied units.
- (17) The housing unit definition was changed for Census 2000, thus, the 2002 NYCHVS changed its definition, accordingly. The primary result of the change applies to what were once termed boarding/rooming houses. Previously, such living quarters may have been classified as a group quarters, and thus, eliminated from the survey. Beginning in 2002, this type of housing was classified as housing units and included in the NYCHVS. **Therefore, use caution when comparing data on the**

**number of housing units (and persons) from surveys beginning in 2002 with prior surveys.**

- (18) In order to have consistent estimates of the number of rent-stabilized units, the rent regulation coding system was changed in 2005 to classify all rent-stabilized units as rent-stabilized, even if they were also HUD regulated. In 2002 and previous surveys, rental units that were both HUD-regulated and also rent stabilized were classified in the final Control Status Recode as HUD Regulated. However, under that system, fluctuations in the number of HUD-regulated units created fluctuations in estimates of the number of rent-stabilized units. By making this change, units classified as HUD-regulated will have no effect on estimates of rent-stabilized units. The microdata files for 2008, 2005 and 2002 (re-issued) include two rent regulation category codes, one under the old system and one under the revised system. For 2011, only the latest revised system of categorizing rent-stabilized and HUD-regulated units is used. See data record layout for specific details.
- (19) Beginning in 2011, a new column was added for all rental housing data on the tabulations (Series IA, IIA and VIIA) that divides the prior column “All Other Rental Housing” into two categories – “All Other Government Assisted/Regulated” and “All Unregulated Renter Housing”. This new designation should aid data users in distinguishing private rental housing from other government-affiliated rental housing that are not public housing or Mitchell Lama rental housing.

**As a result of the differences noted above, comparisons between surveys should be made with caution particularly when comparing data with surveys prior to 1991.**

**Independently Developed Population and Housing Unit Controls**

Beginning with the 1975 NYCHVS, independently developed population controls have been part of the weighting process, with similar controls for housing units since 1991.

The population controls applied to the NYCHVS are by borough, age, race, gender, and (beginning in 2008) Hispanic origin. They were developed beginning with the 2010 Census population totals and then adding or subtracting the demographic components of population change such as births, deaths, and net domestic and international migration. Housing unit estimates use building permits and estimates of housing unit loss to update housing unit change since the last census. Items that are not controlled to independent estimates (such as income) are subject to a greater degree of sampling variability. The use of independent estimates for certain characteristics has no direct effect on other survey estimates.

Such controls are employed to help insure that survey estimates of total population and housing units equal a known total, resulting in a certain level of consistency between results of different surveys for the estimates being controlled. They also correct for known coverage errors that are common to all household surveys. Research has shown that surveys tend to miss a substantial number of persons and housing units.

### **Statement on Undercoverage**

All demographic surveys suffer from undercoverage. This undercoverage results from missed housing units and missed persons within sample households. The undercoverage also varies by age, ethnicity, and race of householder; however, estimates of this undercoverage are not available. For some household composition (e.g. persons per household) and income characteristics, estimates are affected by missed persons within households. The weighting procedures used by the Census Bureau partially correct for the bias due to undercoverage. However, its final impact on estimates is unknown.