

## **U.S. Census Bureau “Hard-to-Count” Methodology Overview**

### Overview of Information on “Hard-to-Count” Areas

The U.S. Census Bureau has developed a database file that contains “hard-to-count” (HTC) scores summarizing the attributes of 65,184 census tracts across the country in terms of enumeration (counting) difficulty. The database is based upon Census 2000 data and Census 2000 geographic boundaries. The data were taken from sample (“long form”) results from approximately 1 in 6 households, and are therefore subject to sampling error.

In late-2009, the City of San Jose, in coordination with the County of Santa Clara, conducted various activities in preparation for Census 2010. Among these activities was to review and analyze the Census Bureau database containing HTC scores. One result of this analysis was creation of the attached “Hard-to-Count” thematic map, which identifies and categorizes census tracts in San Jose according to the range of local HTC scores. The City of San Jose’s census tracts were assigned to four categories, as follows:

- 25 “very hard to count” census tracts (HTC score over 60);
- 28 “hard to count” census tracts (HTC score 51-60);
- 26 “somewhat hard to count” census tracts (HTC score 41-50); and,
- 118 “relative ease in counting” census tracts (HTC score less than 41).

The distribution of census tracts in San Jose according to these four “Hard-to-Count” categories is illustrated in the attached map.

In conclusion, the following general points can be made:

1. The HTC score of a census tract is merely a predictive indicator of potential counting difficulty, and cannot be used to determine the actual level of census undercount.
2. The HTC scores in the City of San Jose are relatively low. Compared to the full range of HTC scores occurring on the national level (0 to 132), the highest HTC score in San Jose was 94, while the mean and median HTC scores across all census tracts in the City were 35 and 33, respectively.
3. Mail participation rates in return of census questionnaires have and continue to be quite high for Santa Clara County and the City of San Jose. In Census 2010, the County of Santa Clara achieved the 2<sup>nd</sup> highest return rate (77%) in the State of California, and the City of San Jose achieved a similarly high 76%--two percentage points higher than in Census 2000 (Note: for Census 2010 mail participation rates across the country, please visit <http://2010.census.gov/2010census/take10map/>).
4. The HTC scores and mail participation rates for Census 2010 have not been released by the U.S. Census Bureau and are not known at this time. For Census

2000, the Census Bureau's "Final Response Rates" were published on April 2, 2004, four years after Census 2000 was conducted (Note: for Census 2000 final response rates, please visit <http://www.census.gov/dmd/www/response/2000response.html>).

### U.S. Census Bureau Methodology

The U.S. Census Bureau builds on experience in past efforts, and uses a total of twelve variables to produce HTC scores for census tracts across the country. The scores can range from 0 to 132, from easiest to hardest to count. The twelve variables included in 2000 information were as follows:

1. Percent of vacant units
2. Percent of housing units that are not single detached or attached units
3. Percent of renter-occupied units
4. Percent of occupied units with more than 1.5 person per room
5. Percent of households that are not husband/wife families
6. Percent of occupied units with no telephone service
7. Percent of people that are not high school graduates (ages 25+)
8. Percent of people below poverty
9. Percent of households with public assistance income
10. Percent of people unemployed
11. Percent of linguistically isolated households
12. Percent of occupied units where householder moved into unit 1999-2000

The HTC scores for census tracts were developed by the U.S. Census Bureau by the following method:

- (1) Each individual variable was sorted across all geographic areas from high to low
- (2) Scores (0 to 11) were assigned to each variable for each census tract
- (3) The scores which were assigned to each of the twelve variables for a census tract were then added together to form a composite total HTC score for the census tract

The comparative standing of areas provides an indicator of the likely degree of difficulty in counting the population. Areas with the highest scores are likely to be areas with higher non-return rates for census forms and population undercount rates, while areas with the lowest scores are likely to be areas with low rates. The effectiveness of the database variables and HTC scores to "predict" likely undercount issues has been demonstrated by testing against empirical measures of mail return rates and net undercoverage rates in the 1990 census and Census 2000, along with other Census Bureau tests and rehearsals.

# City of San Jose

## Census 2010 "Hard-to-Count" (HTC) Areas

